STIBO SYSTEMS
MASTER DATA MANAGEMENT

USER GUIDE

Getting Started

2024.1 – March 2024

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Getting Started

This section is intended to provide users with an introduction to the STEP system and concepts. Additionally, it provides detailed information needed to perform basic data maintenance tasks in STEP, including detailed descriptions of the workbench interface and search functionality. While geared towards end users, the guide provides information that is necessary for all users to understand as a foundation for more advanced topics.

This guide is centered around STEP Workbench, but the concepts and functionality presented are often applicable to both the workbench and Web UI interfaces. Because of this, it is helpful for users of either interface to be familiar with the material in this guide. For documentation specific to the Web UI, refer to the **Web User Interfaces** guide.

The Getting Started guide contains the following sections.

- Introduction: This section includes a terminology table and an overview of some basic STEP concepts. This material should be understood prior to proceeding through the guide as it lays the foundation for the subsequent topics.
- STEP Workbench UI: This section introduces the user to the workbench interface, as well as providing detailed reference information for the various functions, including toolbar actions and menu options.
- Object Maintenance in the Tree Tab: This section provides an overview of creating, editing, and deleting objects in the workbench, as well as providing detailed information for working with particular types of objects.
- Navigating and Searching: This section introduces the user to basic search and navigation functionality in STEP Workbench, as well as providing detailed descriptions of the search criteria available on the Search tab.
- STEP Workbench Keyboard Shortcuts : This topic provides a list of keyboard shortcuts that can be used in the workbench.

Introduction

This section introduces the reader to basic STEP terminology and concepts. This information provides a foundation that is key to understanding the subsequent materials.

- **STEP Terminology**: A table defining basic STEP terms, including links to topics with additional information.
- **Basic STEP Concepts**:Introduces some core concepts in STEP to facilitate understanding of the Getting Started and System Setup guides.
- **Object Super Types**: Provides an introduction to the STEP object super types, including links to detailed information for each type.

STEP Terminology

This topic provides definitions for basic STEP terminology that is helpful to be aware of when reading the online help. Links to additional material on related topics are also provided, when appropriate. This should not be considered a complete list of all STEP terms as it is intended to cover only the more commonly used terms that users are likely to encounter throughout the online help.

A

Term	Definition	Further Reading
Action	Type of business rule that can be executed to manipulate data or perform an action. Actions can be executed by various processes and events within the system. For example, at approval of an object, within a workflow (on entry to a state, exit from a state, on the transition between tasks, or when a deadline has been met), as part of an import process, or from a bulk update process.	Refer to the Business Actions topic in the Business Rules documentation.
API	refer to *Public API*	Refer to the STEP API Documentation link on the Start Page.
Approval	The process of pushing data from the Maintenance workspace to the Approved workspace in STEP. Approval can be associated with business logic that may prevent approval or may perform automated data updates during approval. Approvals are often the triggers for sending data to downstream systems.	Refer to the Approval of Objects topic in the Getting Started documentation.
Asset	Any type of digital media, such as an image, Word document, PDF, Excel file, PowerPoint, JPG, GIF, etc.	Refer to the Assets topic in the Getting Started documentation.
Asset Push	A process that exports assets from STEP to a file system. Conversion templates can be applied to transform images, for example from high res to low	Refer to the Asset Push

Term	Definition	Further Reading
	res, resizing, applying color scales, etc., though assets can also be sent as-is to make them available on the file system.	topic in the Digital Assets guide.
Assignee	The user or group to which a task is assigned for work to be performed within a workflow. User states can be assigned directly to a named user or to a user group. When a state is assigned to a user group the task is "offered" to all members of that group. To perform the task associated with the state, a member of the group has to claim the task. Once a task is claimed it is no longer visible in the group task list; only the person who claimed the task is able to view it. A user may subsequently release a task back to the group.	Refer to the Assignees in Workflows topic in the Workflows documentation.
Attribute	A characteristic or detailed piece of information related to a particular object. Attributes can be one of two types, description or specification. Description attributes are available on most object types in STEP, while specification attributes are only available on objects in the Primary Product Hierarchy.	Refer to the Attributes topic in the System Setup documentation.
Attribute Group	Groups attributes, reference types, and/or link types. Attribute groups can have sub-groups.	Refer to the Attributes Groups topic in the System Setup documentation.
Attribute Value	The value stored in a particular attribute on a particular object.	Refer to the Attributes topic in the System Setup documentation.

B

Term	Definition	Further Reading
Bookmark	A placeholder created by the user that serves as a shortcut to a previously viewed location.	Refer to the Bookmarks topic in the Getting Started

Term	Definition	Further Reading
		documentation.
Business Rule	Automated piece of programming logic that may implement customer-defined rules, such as validations, automatic updates, notifications, data-driven workflow routing, etc. Also refer to Condition and Action.	Refer to the Business Rules topic in the Business Rules documentation.

C

Term	Definition	Further Reading
Calculated Attribute	An attribute where the value is calculated according to a specific formula defined for this attribute. The formula may include static text, other attribute values, information from references on the object, and a number of other options.	Refer to the Calculated Attributes topic in the System Setup documentation.
Category Profile	View in STEP that helps product managers and data analysts to get an overview of an entire section of the Product Hierarchy through various metrics that are displayed in dashboard format.	Refer to the Data Profiles topic in the Data Profiling documentation.
Character Tag	An entry that begins with "<" and ends with "/>" such as <check/>. These tags represent characters that may not be found in the special character map in Unicode, or may be used instead of the Unicode character.	Refer to the Tags topic in the System Setup documentation.
Claim	The action that a user performs to take a task in a workflow out of a group queue and assign to himself / herself.	Refer to the Claiming and Releasing Tasks in Workflows topic in the Workflows documentation.
Classification	A particular type of hierarchy that organizes groups of objects or assets. Objects are linked to classifications via references, and may have references to multiple classifications. Also referred to as "yellow folders."	Refer to the Classifications topic in the Getting Started

Term	Definition	Further Reading
		documentation.
Collection	An object that holds a static set of objects, or a dynamic search criteria that can be refreshed as needed to find the latest matching objects. Using collections, the resulting data can be displayed, bulk actions can be performed, or the objects can be exported.	Refer to the Collections topic in the Getting Started documentation.
Completeness Score	A measurement within STEP, expressed as a percentage, to indicate the proportion of key data that has been completed for a particular object. This key data is configurable, as is the weighting of importance.	Refer to the Metric Visualization topic in the System Setup documentation.
Condition	A condition is a type of business rule that evaluates to either true or false, and does not change data. In relation with approval, a condition can act as validation for whether an approval action can be carried out. In relation to workflows, conditions can be used to prevent a transition from being taken if certain conditions are not met.	Refer to the Business Conditions topic in the Business Rules documentation.
Context	A specific filter placed on the system data. Each context is a combination of different dimensions such as language, country, and so forth, for example, English US, French CA, or German DE. Data may vary based on context.	Refer to the Contexts topic in the System Setup documentation.

D

Term	Definition	Further Reading
Data Container	An object type for modeling complex entity or product data structures with a single record. Data containers make use of composite attributes which are composed of other data structures, and they are intended to ensure that all create, read, update, and delete operations can be performed as a whole.	Refer to the Data Containers topic in the System Setup documentation.
Data Model	Basic system configuration defining the allowable structures and make up of data within STEP. Consists of system setup data, including: dimensions, contexts, object types, reference types, keys, component	Refer to the sections within the System Setup

Term	Definition	Further Reading
	models, attribute groups, attributes, lists of values, units, and tags.	documentation.
Dimension-Dependent Attribute	An attribute that can have different values for different dimension points, where the actual value is determined by the context in which the attribute is presented.	Refer to the Dimension Dependent Attributes topic in the System Setup documentation.

E

Term	Definition	Further Reading
Entity	A group of master data that has a specific business meaning. Entities typically store product-neutral data in STEP according to client-specific groupings of information, such as customers, employees, suppliers, and addresses. Entities are also often used to store reference data that is utilized within the system. Entities can be grouped into a hierarchy using reference types that are only valid from an entity object to an entity object. A source object can be displayed as a child of the target object or the target as a child of the source.	Refer to the Entities topic in the Getting Started documentation.
Externally Maintained Attribute	A characteristic of an attribute or reference that can be set to 'Yes' or 'No'. A 'Yes' selection indicates that the data point is maintained externally, and a change in it does not trigger a change in approval status and/or a new revision on the STEP object on which the data was changed. A 'No' selection indicates that the data point is maintained internally and a change in it has the potential to trigger a change in the approval status and/or a new revision on the STEP object on which the data was changed.	Refer to the Externally Maintained Attributes topic in the System Setup documentation.

F

Term	Definition	Further Reading
Function	A type of business rule that allows for input parameters to produce an output. These operations are side-effect free, and it do not change STEP data.	Refer to the Business Functions topic in the Business Rules documentation.

G

Term	Definition	Further Reading
Golden Record	Collection of data from a variety of sources, based on matching, linking, and survivorship rules. The Golden Record is considered the trusted data record, compiled from the various source objects.	Refer to the Survivorship in Match and Merge topic the Survivorship in Match and Link topic in the Matching, Linking, and Merging documentation.
GUI	Graphical user interface. For STEP, this can be the workbench or Web UI. A GUI	Refer to the GUI Setup topic in the System Setup documentation or the Design Mode Basics topic in the Web User Interfaces documentation.

H

Term	Definition	Further Reading
Hierarchy	A data structure composed of parents and children.	Refer to the Object Type Hierarchy topic in the Object Types and Structures of the System Setup documentation.
Hotfolder	File system of folders where data can be dropped for automatic loading into STEP, based on the particular configurations and/or code applied to the hotfolder.	Refer to the IIEP Receiver Methods in the Data Exchange documentation, Configuring an Asynchronous File Exchange Service in the Data Integration documentation, or Asset Importer in the Digital Assets documentation.

I

Term	Definition	Further Reading
ID	The unique identifier for all objects within STEP. It cannot be translated or edited once created, and cannot contain special characters.	
Image	A series of parameters defining the way in which an image is transformed	Refer to the

Term	Definition	Further Reading
Conversion	from the standard high resolution asset that exists in STEP to the required downstream format. Several conversion options are available by default, and additional conversions can be added via configuration and/or extensions. Note that conversions change assets as they are pushed from STEP, leaving the originating file unchanged in STEP.	Image Conversion Configuration topic in the Digital Assets documentation.
Inbound Integration Endpoint (IIEP)	Communication channel defining how data is received by STEP. Each endpoint defines how data is received from an external system, specifying location, transport protocol, data to be exchanged and other configuration parameters.	Refer to the Inbound Integration Endpoints topic in the Data Exchange documentation.
Integration Endpoint (IEP)	Communication channel between STEP and external systems. Refer to Inbound Integration Endpoint and Outbound Integration Endpoint.	Refer to the Data Exchange documentation.
Inheritance	The ability to make data available in the product or classification hierarchy to lower nodes by linking it to a higher node in the hierarchical structure.	Refer to the Inherited Attributes topic in the System Setup documentation.

J

K

L

Term	Definition	Further Reading
Library	Set of functions that can be reused in multiple business rules or other libraries. Libraries cannot be called independently and must be referenced from other actions, conditions, or functions.	Refer to the Business Libraries topic in the Business Rules

Term	Definition	Further Reading
		documentation.
Link	A parent/child relationship between objects within the STEP system.	Refer to the Reference and Link Types topic in the System Setup documentation.
List of Values (LOV)	A validation base type for an attribute that only allows a value to be considered valid if it belongs to a respective list of pre-configured values assigned to the attribute. Also used to refer to the value list itself. LOVs are also referred to as 'Domains' at times.	Refer to the List of Values (LOVs) topic in the System Setup documentation.
Localized Value	An attribute value that is set directly on an object and is not inherited from any level above in the hierarchy.	Refer to the Inherited Attributes topic in the System Setup documentation.

M

Term	Definition	Further Reading
Mandatory Attribute	Indicates that the product and all its sub-products must have a value for the specified attribute in order for the object to be approved.	Refer to the Mandatory Attributes topic in the System Setup documentation.
Multi-Valued Attribute	An attribute that can contain more than one value for a specific object.	Refer to the Editing Multi-Valued Attributes topic in the System Setup documentation.

N

O

Term	Definition	Further Reading
Object	An element within the system, for example, a product, image, classification, attribute, workflow, business rule, etc.	Refer to the Basic STEP Concepts topic in the Getting Started documentation.
Object Type	A specific label for levels within a taxonomy, given to different elements within the system. Nearly every object in STEP is labeled with an object type to help identify what it is (i.e., a product or entity rather than an image, a TIF rather than a PDF, etc.). This includes entities, products, product categories, alternate hierarchies, images and other assets, attributes, and LOVs. Through the use of object types, system administrators can control how rigid or loosely defined the database will be in terms of object creation and where objects are allowed to 'live' and/or be used. This labeling also becomes very important when working with exported data so that each type of object in STEP can be identified for special handling in web applications or other uses outside of STEP.	Refer to the Basic STEP Concepts topic in the Getting Started documentation.
Orphan Attribute	A specification attribute that has a value, which has been deleted from / not linked to a product node or classification and is denoted by italics.	Refer to the Linking Orphan Attributes topic in the System Setup documentation.
Outbound Integration Endpoint (OIEP)	Communication channel defining how data is sent by STEP. Each endpoint defines how data is sent to an external system, specifying location, transport protocol, data to be exchanged and other configuration parameters.	Refer to the Outbound Integration Endpoints topic in the Data Exchange documentation.

P

Term	Definition	Further Reading
Post-processor	A plugin component within the IEP framework that allows STEP to act on the result of the import / export such as starting workflows, sending notifications, etc.	Refer to the IIEP Configuration Flipper and the OIEP Output Templates Flipper topics in the Data Exchange documentation.
Pre-processor	A plugin component within the integration endpoint framework that allows STEP to modify the message prior to import / export. It can be used for various functionality such as pre-validation, format conversion, filtering, etc.	Refer to the IIEP Configuration Flipper and the OIEP Output Templates Flipper topics in the Data Exchange documentation.
Primary Product Classification (PPC)	Hierarchy that allows for different types of objects to be stored once in the database; each object within this hierarchy has a unique ID / identifier and may have only one location within the hierarchy. Also referred to as the 'blue hierarchy'.	Refer to the Object Type Hierarchy topic in the System Setup documentation.
Product	One of the object super types, referring to any object within the Primary Product Classification (blue hierarchy).	Refer to the Products topic in the Getting Started documentation.
Product Template	InDesign templates that determine what type of data will appear on a printed page, including the positioning and styling.	Refer to the Product Templates topic in the Publisher (Adobe InDesign Integration) documentation.
Product Variant	Data type used to model multiple variants of a similar object. For example, T-shirts in various sizes and colors could all be variants of a single product.	Refer to the Product Variants topic in the System Setup documentation.
Print Proof View	A tab in workbench or Web UI that displays a product template view ('proof') of a selected node (typically a Product but can also be an Entity or Classification) without the user needing to access InDesign.	Refer to the Print Proof View section of the Publisher (Adobe InDesign Integration) documentation.
Publication	One of the super types, referring to objects in the publication (green) hierarchy.	Refer to the Publication Hierarchy section of the

Term	Definition	Further Reading
		Publisher (Adobe InDesign Integration) documentation.
Public API	The set of server-side functions that have been exposed to be used in the business logic. This includes many functions to create, get, and set data, such as values and references. It also includes various methods for logging as well as sending emails.	Refer to the STEP API Documentation link on the Start Page.
Purge	Removal of an object from the database. Following purge, an object cannot be revived.	Refer to the Revisions topic in the System Setup documentation.

Q

Term	Definition	Further Reading
Queue	The mechanism within the IIEP framework that allows messages to be processed in an asynchronous way. The queuing concept allows separating processes from different integration endpoints as well as controlling the degree of parallel imports (a queue size of one guarantees sequential import, while a queue size larger than one allows parallel processing of multiple messages for increased throughput where sequential execution is not required).	Refer to the Background Processes and Queues topic in the System Setup documentation.

R

Term	Definition	Further Reading
Reference	An association between objects within the STEP system.	Refer to the Reference and Link Types topic in the System Setup documentation.

S

Term	Definition	Further Reading
Setup Entity	A configuration object that is based on a generic type of object which has been expanded for the specific need. For example: Completeness Metric, Elasticsearch Configuration, Asset Importer Configuration Type. Setup entities are identified in the URL with 'step://SetupEntity', in STEPXML within the <SetupEntities> tag, and in user privileges via the Maintain Setup Entity action set. Setup Entities can be exported using both the STEPXML and Advanced STEPXML formats.	Refer to the URL Address Field section of the Toolbar topic and the Setup Actions and Error Descriptions topic, both in the Getting Started documentation. Also refer to the STEP-ProductInformationTag in STEPXML topic and the STEPXML Outbound Parameters topic, both in the Data Exchange documentation.
Special Character	A character that cannot be found on a standard keyboard but can usually be found in the Windows character map. Example: Trademark Symbol - ™	Refer to the Tags topic in the System Setup documentation.
State	A step within a workflow to which a specific user, user group, or system can be assigned to complete the task (s) associated with the state.	Refer to the Creating a Workflow topic in the Workflows documentation.
STEP	Stibo Enterprise Platform master data software application that provides business managers a single source database to store, manage, and re-purpose product information for publication or syndication.	
STEP'n'design	STEP's plugins for InDesign that allow data from the STEP database to be pulled onto pages.	Refer to the Publisher (Adobe InDesign Integration) documentation.
STEPXML	The native XML language for STEP, which can be used for importing / exporting STEP data, as well as transferring configurations between STEP systems.	Refer to the STEPXML Format topic in the Data Exchange documentation.
Super type	A major category of data within STEP including: Asset, Classification, Entity, Product, and Publication. Refer to the specific definition for each super type for additional information.	Refer to the Object super types topic in the Getting Started documentation.

Term	Definition	Further Reading
Super User	A user that is given administrative privileges within the STEP system.	Refer to the Actions Sets topic in the System Setup documentation.
Superseded	The 'Superseded' status displays with affected components and serves as guidance to admin users selecting which components to implement when configuring their Web UI.	Refer to the Web UI Component Basics topic in the Web User Interfaces documentation.

T

Term	Definition	Further Reading
Task	The work and/or action that must be completed within a specific workflow state (whether by a user or via automation).	Refer to the Working with Tasks in Workflows topic in the Workflows documentation.
Transition	The change of tasks from one state to another within a workflow.	Refer to Creating a Workflow in the Workflows documentation.

U

Term	Definition	Further Reading
Unique Key	A unique key is a system entity that represents a specific object in the STEP system. The entity is composed of one or more data points, whether utilized as-is or in a combined and/or transformed format using a specified formula. There can be exactly one record for each object for each defined key. No two objects with the same unique key for an active key can exist.	Refer to the Unique Keys topic in the System Setup documentation.
User Permissions	Rules that allow or restrict users from performing certain functions within the system.	Refer to the Privilege Rules topic in the System Setup documentation.

V

Term	Definition	Further Reading
Validation Base Type	A characteristic of attributes that identifies the format of the accepted data for the attribute value, such as whether the value is a date, integer, fraction, text, LOV, etc.	Refer to the Validation Rules topic in the System Setup documentation.

W

Term	Definition	Further Reading
Web UI	A web-based interface to access the STEP database in order to read, edit, or download data and assets. Multiple Web UIs can be configured for each STEP installation.	Refer to the Web User Interfaces documentation.
Workbench	An interface for managing data in STEP, as well as carrying out administrative functions.	Refer to the STEP Workbench UI topic in the Getting Started documentation.
Workflow	Business process(es) modeled as a series of states and tasks that can be executed by users and/or automatic processes within the STEP system. Workflows prompt the next step of a process to be started, by either creating a task for a user, or sending an alert. Workflows may contain a number of process steps or tasks, as well as business logic.	Refer to the Workflows documentation.
Workspace	A set of independent 'copies' of the database objects that provides a revision-specific view of objects. Workspaces are organized into separate areas including Main and Approved. The Main workspace is where data maintenance takes place. The approved workspace is a non-editable snapshot of data that has been determined to have been acceptable for publishing to downstream systems.	Refer to the Workspaces topic in the System Setup documentation.

X

Y

Z

![Stibo Systems logo](STIBO SYSTEMS MASTER DATA MANAGEMENT)

Basic STEP Concepts

This topic introduces the reader to some fundamental STEP concepts that provide a foundation for the rest of the material in the Getting Started documentation, as well as the System Setup documentation. The focus of this topic is on data structures and data management, and is *not* intended to be an introduction to the full capabilities of a STEP system.

Object Types Overview

Technically, nearly everything in STEP is an object, and object types must be defined for which instances of objects can exist. Object types provide a specific label for levels within a taxonomy, given to different elements within the system. Nearly every object in STEP is labeled with an object type to help identify what it is (i.e., a product or entity rather than an image, a TIF rather than a PDF, etc.). This includes entities, products, product categories, alternate hierarchies, images and other assets, attributes, and LOVs. Through the use of object types, system administrators can control how rigid or loosely defined the database will be in terms of object creation and where objects are allowed to "live" and/or be used. This labeling also becomes very important when working with exported data so that each type of object in STEP can be identified for special handling in web applications or other uses outside of STEP. Object types in STEP can largely be divided into two categories:

- Tree Object Types: Object types that make up the standard STEP hierarchies accessible on the Tree tab in workbench. Many of these object types can be further grouped into five categories of object types, referred to as the super types. Tree object types are defined in System Setup, but instances of the object types are accessed within the Tree.
- System Setup Object Types: Also referred to as Basic Object Types. This category encompasses all of the remaining object types that make up a STEP system. Among many other things, this includes attributes, users, integration endpoints, workflows, and business rules. System Setup object types are defined in System Setup, and instances of the object types are also accessed within System Setup.

More information on object types in general, including how to create and maintain object types, can be found in the **Object Types and Structures** section of the **System Setup** documentation.

Object Super Types

Each super type has specific characteristics that make it suitable for modeling particular types of data. For example, inheritance of data is available within the Product super type so objects that share data based on common characteristics are typically modeled using this super type. Alternatively, digital media files are housed using the Asset super type, which allows for automatic reading and storing of asset properties such as size and format. Any number of individual object types within each super type can be created. For example, a system may use both an 'Icon' object type and an 'Illustration' object type (along with any number of others) within the Asset super type.

The object super types are:

1. Assets
2. Classifications

3. Entities
4. Products
5. Publications

More information on the characteristics of the various super types can be found in the **Object Super Types** topic within this guide.

Object Types Versus Object Instances

Two core capabilities for managing data in STEP are the Tree tab and the System Setup tab. In order to successfully use STEP, it is critical to understand the differences between the functions available in these two areas, specifically in relation to *types* of objects versus *instances* of objects.

Technically, everything in STEP is an object, including workflows, attributes, business rules, export and import configurations, products, classifications, images, etc. However, the term "objects" is more generally used to mean assets, classifications, entities, products, and publications. In other words, the super types are also all things that you can find on the Tree tab in STEP. This section focuses on the differences between object types and object instances for Tree objects, specifically those that fall into the super types.

For example:

The objects and structures available in the Tree will vary based on your particular data model, but the concepts described can be applied across any data model. Regardless of the specific names or structures, each node on the Tree tab is an individual object that has a defined "place to live" within a hierarchy. A user can right-click on many of these objects and have a 'New...' option, such as 'New Product' or 'New Classification', allowing them to create a new node in the hierarchy. For example, when right-clicking on the 'Apparel' object and selecting 'New Product', a dialog appears with an option to create a 'Level 2' object.

Typing a Name and clicking Create would create a new object as a child to the Apparel node. But what defines that a 'Level 2' object can be created on this node? And that it is a Product (blue) object rather than an Entity (gray) or Classification (yellow)?

The allowable structure of objects and hierarchies that are accessed in the Tree are defined in System Setup. To continue with the above example, we can observe that the defined object types and structures include a Primary Product Classification that has a number of levels. A Level 1 can only have a Level 2 child, which in turn can only have a Level 3 child. However, a Level 3 object type can have a number of child object types, including an Item Folder, Level 4, and a Sales Item Folder. A Sales Item Folder is a child of a Level 3 object type, as mentioned, but can also be a child to a Level 4. Similarly, a Sales Item can be child to multiple things, including a Sales Item Folder and a Sales Item Family.

System Setup

```
Object Types & Structures
  ├─ Alternate Classifications
  ├─ Assets
  ├─ Basic Object Types
  ├─ Commercial Types
  ├─ Entity user-type root
  ├─ Event Queue Object Types
  └─ Primary Product Classification
       ├─ Discontinued Products
       ├─ External Products
       ├─ Packaging Hierarchy
       ├─ Primary Product Classification
       ├─ Product Overrides
       └─ Products
            └─ Level 1
                 └─ Level 2
                      └─ Level 3
                           ├─ Item Folder
                           │    └─ Item
                           │         └─ Open Item
                           ├─ Item Family
                           │    └─ Item
                           │         └─ Open Item
                           └─ Level 4
                                ├─ Item Folder
                                │    └─ Item
                                │         └─ Open Item
                                ├─ Item Family
                                │    └─ Item
                                │         └─ Open Item
                                ├─ Sales Item Folder
                                │    └─ Sales Item
                                │         └─ Open Sales Item
                                └─ SalesItemFamily
                                     └─ Sales Item
                                          └─ Open Sales Item
                           ├─ Sales Item Folder
                           │    └─ Sales Item
                           │         └─ Open Sales Item
                           └─ SalesItemFamily
                                └─ Sales Item
                                     └─ Open Sales Item
```

The object types defined in System Setup provide the "skeleton" for the allowable instances of objects that can be created in the Tree. It is important to understand that it is only the *structure* and *types* of objects that are

defined in System Setup, but any number of *instances* of the defined types can be created in Tree. This is best illustrated by viewing System Setup and Tree side by side, as shown below. Object instances are displayed in Tree, with red text indicating the corresponding object type designations from System Setup.

Notice in the above screenshots that a Level 2 object exists in System Setup only once, but there are multiple instances of it in Tree.

The same principles described for the Primary Product Hierarchy apply to all other hierarchies in STEP. For example, an entity hierarchy could have a Customer object type with allowable children of Address and Contact object types. The object types and structures are defined in System Setup, and instances of these objects can then be created in Tree.

Note that object super types can only exist within their designated hierarchy types. To clarify, a product hierarchy (blue hierarchy) can only contain object types of the product super type, while an entity hierarchy (gray hierarchy) can only contain objects of the entity super type. It is possible to have the visual appearance of mixed hierarchies, but this is accomplished via references rather than actual data structures. For example, products may appear in the Tree to be within a classification hierarchy, but this is due to references on the object, as shown below.

Notice that the corresponding System Setup structure for the above does not include the product object types.

The true residence of the product objects is within the Primary Product Classification, with a visual display of the product references into various classification hierarchies being just that: a visual display of references. However, assets are an exception to this concept. Assets are not part of the Classification structure in System Setup, but do in fact exist within this structure in Tree. Each asset must be linked in to one or more classifications, and this is the only location in which they "live" in STEP. Each asset automatically has a reference applied to each classification in which it is linked. More information on references can be found in the **Reference and Link Types** topic in the **System Setup** guide. More information on the various object super types and their characteristics can be found in the **Object Super Types** topic within this guide.

Using the above information, the questions posed earlier in this topic can now be answered:

Why can we only create a Level 2 object under the Apparel node? Because in this particular data model configuration the Apparel node is a Level 1 object type, and only Level 2 object types are allowed to be created under a Level 1 object type.

Why can we not create an Entity or Classification under the Apparel node? Because only object types within the same super type can exist within the same hierarchy. And even if this was not the case, the structure defined in System Setup in this particular hierarchy only allows a Level 2 object type (of the product super type) under a Level 1 object type.

> **Note:** All text data is saved in the system in Unicode UTF-8. All standard data exports from the system are also in UTF-8. Some system extensions may use a different character set on export, but the standard is UTF-8.
>
> UTF-8 can define more than one million characters. To do so, it uses up to 4 bytes of storage. Regardless of whether it uses one, two, three, or four bytes, it is still one character and as such any character counts that are imposed on text attribute's length is specified and counted in characters and not bytes.
>
> As a standard, the Microsoft Arial Unicode font is used for display. Its character set supports most languages of the Americas, and Western and Eastern Europe (including Cyrillic and Greek). In some cases, as in the case with some Asian languages, additional fonts must be loaded onto the PC or MACs. But for most cases, the character set provided by Arial Unicode MS is sufficient.
>
> For more information on Unicode UTF-8 the reader is advised to refer to the various web sites that describe its functionality, such as the Wikipedia site: https://en.wikipedia.org/wiki/UTF-8.

Object Super Types

This topic provides an introduction to the STEP object super types. It will be helpful to have read and understood the **Basic STEP Concepts** topic in this guide prior to reading this material.

Object types that make up the standard STEP hierarchies accessible on the Tree tab in workbench are referred to as Tree Object Types. Many of these object types can be further grouped into five categories of object types, referred to as the super types. This topic introduces the five primary object super types in STEP. Understanding the differences between the various object super types is important when making decisions about how to model data in STEP.

Each super type has specific characteristics that make it suitable for modeling particular types of data. For example, inheritance of data is available within the Product super type so objects that share data based on common characteristics are typically modeled using this super type. Alternatively, digital media files are housed using the Asset super type, which allows for automatic reading and storing of asset properties such as size and format. Any number of individual object types within each super type can be created. For example, a system may use both an 'Icon' object type and an 'Illustration' object type (along with any number of others) within the Asset super type.

The object super types are:

1. Assets
2. Classifications
3. Entities
4. Products
5. Publications

Each is described below, along with links to more detailed information for working with the various super types.

Assets

The Asset super type is used to hold any type of digital media, including images, videos, documents, and text files. Assets are organized within classifications, and can be linked to other objects in STEP using references. Specifically, assets can be linked to objects of the Classification, Entity, or Product object super types. Upon import, STEP populates some basic information about each asset, which can be viewed under the System Properties flipper on each asset, but cannot be edited. Default asset icons vary by file type, and can be updated by admin users.

For more information on working with assets, refer to the **Assets** topic within this guide.

Classifications

The Classification super type is used to build hierarchies and objects that bundle other objects into organized groupings. These are represented by default with yellow folders in STEP, though these icons may be updated by an admin user. For example, images, manuals, and icons could be uploaded to STEP as assets and stored in appropriate subfolders under the 'Assets' classification folder. Product objects could also be linked into classifications to provide alternative categorizations of objects that vary from the product hierarchy structure.

For more information on working with classifications, refer to the **Classifications** topic in this guide.

Entities

The Entity super type is used to create hierarchies and objects that do not require inheritance of data through categorized groupings. Entities are commonly used to store customer, location, or person data, as well as to store reference data. In addition, entities are used to store source data for golden records. Entities are represented by gray folders and white and gray cubes by default, but these can be updated by an admin user, as is evident in the screenshot below.

For more information on working with entities, refer to the **Entities** section of this guide.

Products

The Product super type is used to create hierarchies and objects that use inheritance of data for objects categorized by similar characteristics. In STEP, products are represented by default with blue icons either as folders or nodes, though these icons can be updated by an admin user. Upper nodes in a product hierarchy are often categories and subcategories, with leaf nodes being actual objects. Whether an organizational folder, sellable object, or something else, each node in the hierarchy is of the product super type, and all child objects are able to inherit attributes and values from parental objects.

For more information on working with products, refer to the **Products** section of this guide.

Publications

The Publication super type is used to create hierarchies and objects used for print publishing solutions, including Print Publisher, Print Flatplanner, and Print AutoPage. Publication objects are used to create templates used in print solutions, as well as publications such as catalogs or pamphlets. Product objects can be linked into publication hierarchies, meaning data from the product(s) will be reflected in the publication. Publication objects use green icons by default, though these can be updated by an admin user.

Tree
Publications
├ Templates
├ Autopage Publications
│ ├ Acme Wholesale Clothing
│ │ ├ Commercial Data
│ │ ├ Caps and Hats
│ │ ├ Shirts
│ │ ├ Shoes
│ │ │ ├ 20714
│ │ │ ├ 20695
│ │ │ └ DTP Documents
│ │ ├ Jewelry
│ │ ├ Accessories
│ │ └ Gloves
│ └ Beta Tools
│   ├ Commercial Data
│   ├ Power Tools
│   ├ Hand Tools
│   ├ Toolboxes
│   └ Garden Tools
├ Standard Publications
└ Flatplanner Publications

Shirts - Publication Section

AutoPage Publication Planner | Pagination Rules | Page Inspector | Status | State Log | Tasks
Publication Section | Plan | Publication Planner | Plan Notes | Financial Summary

Description

Name		Value
ID		111845
Name		Shirts
Object Type		Section
Revision		0.2 Last edited by USER4 on Mon Aug 29 11:40:21 EDT 2016
Path		Publications/Autopage Publications/Acme Wholesale Clothing/Shirts
Start section on page		2
Effective Date	📅	
Expiration Date	📅	
Section Theme	abc	Shirts
Circulation	123	
Cover Photo Shot Due	📅	
FirstPageNumber	ƒx	5
LastPageNumber	ƒx	9

For more information on working with publication objects, refer to the **Publication Hierarchy** section of the **Publisher (Adobe InDesign Integration)** documentation.

Accessing STEP System Information

The simplest way to access system information about your STEP installation to click the **About STEP** link on the Start Page.

STEP system information is useful for system troubleshooting and new project planning, as well as helping users ensure compliance with their contracted license terms.

The most straightforward way to view system information is to click About STEP from the Start Page. System information is also available in the Admin Portal install.log or by running a Stibo Patch Operations Tool (SPOT) command on the application server. For more information on the install.log, refer to the **Logs** topic in the **Administration Portal** documentation. For on-premise systems, information on SPOT is included in the **SPOT Program** topic in the **System Administration Guide** found in **Downloadable Documentation**. For SaaS systems, contact Stibo Systems.

'About STEP' Page

When the About STEP icon is clicked, a new page is opened (e.g., http://[yoursystem]/about/step) that is password protected to ensure that only STEP users have access to the information.

This 'about' page displays the following information:

- 'System name'
- 'STEP version' in a string (as shown below) that identifies the system by its baseline version that includes the major release version number (e.g., **10**); minor release number (e.g., **.2**); the maintenance patch version, if applicable (e.g., **mp2**); and the baseline creation date.
- 'Number of user accounts' and the 'Number of allowed user accounts'. Standard STEP users that do not count against the number of licensed users are not included in the user count, such as DBA, STEPSYS, SERVICE, and SWADMIN.
- The approximate number of 'products', 'classifications', 'assets', and 'entities'. Object counts are approximate because changes can happen in the background while the page is being viewed. Also, for time purposes, the quick approximation number is preferable to an exact count, which could potentially tie up system resources for a prolonged time.
- The number of 'contexts', 'dimensions', and 'languages'.

- System name: **doc-rel**
- STEP version: **10.2-mp2-2021-08-18-13-51-12**
- Detailed version information
- Number of user accounts (including suppliers): **64**
- Number of supplier accounts: **7**
- Allowed number of user accounts: **100**
- Number of products (approx.): **900**
- Number of classifications (approx.): **8000**
- Number of assets (approx.): **500**
- Number of entities (approx.): **7000**
- Number of contexts: **12**
- Number of dimensions: **2**
- Is InMemory Enabled: **false**
- Number of languages: **10**

The full version information of this system is available via snapshot.spr file, please submit this file along with any support requests.
If you are having any problems with the STEP system, please produce a diagnostics package instead. This can be done via the Administration page.

Detailed Version Information

A 'Detailed Version Information' hyperlink is also included that opens a new page (e.g., http://[yoursystem]/about/version) where you can access information about the add-on components, customizations, and hotfixes applied to your system. If your system contains none of these, only the current baseline version of the system is displayed.

- Baseline version: **step-10.2-mp2-2021-08-18-13-51-12**
- Add-on components: **wikimetadata-7.0.7**
  value-generator-7.0.4
  user-anonymizer-7.0.7
  ui-search-7.0.11
  ui-product-editor-7.0.19
  ui-basket-7.0.14
  syndigo-7.0.5
  local-loqate-7.0.14

System Snapshot and Diagnostics Package Links

Below the bullet list, additional information is provided to assist users who need to access more complete system information for support purposes.

Provided is a snapshot.spr link where you can download a snapshot file that contains full system information, including installed bundles, metrics, and differences to previous snapshots. This file is intended to be submitted to Stibo Systems along with support requests. For more information on snapshots and their contents, refer to the **Tools** topic in the **Administration Portal** documentation.

Also included is a link to the Administration Portal page, in case you need to produce a diagnostics package. This package is generated and uploaded to Stibo Systems from the 'Send Diagnostics' tab. For more information, refer to the **Send Diagnostics** topic in the **Administration Portal** documentation.

STEP Workbench UI

The screenshot below shows a basic view of the STEP Workbench. Though system customizations and variable access permissions may result in a slightly different view, the basic elements in this view of the workbench's Main Window will be present for most users. The key elements of workbench UI are numbered and defined below.

Important: A one-time install of the STEP Workbench Launcher needs to be done on each client workstation before opening workbench. STEP Workbench users do not need Java installed separately on their computers. After installation, the workbench will launch via conventional means. For details and directions, click on the Workbench Launchers icon, accessible on the Start Page.

> **Note:** The STEP Workbench is a Java client. STEP's backend is AdoptOpenJDK.

1. The Menu Bar contains a collection of various tools for users to perform actions in the workbench. For more information, refer to the **Menu Items** topic in this documentation.

2. The Toolbar contains actions that help with the view and navigation of the workbench. For more information, refer to the **Toolbar** topic in this documentation.

3. The Tree tab navigates users to the object tree in the workbench. For more information, refer to the **Tree Tab** topic in this documentation.

4. The Search tab provides access to the advanced search functionality of the workbench where users can filter results, save these results as a collection, export these results for external use, or perform bulk updates on these results. For more information, refer to the **Search Tab** topic in this documentation.

5. The BG Processes tab contains all of the background processes occurring in the STEP instance. For more information, refer to the **BG Processes Tab** topic in this documentation.

6. The System Setup tab contains all of the administrative actions to set up the workbench to maintain data. For more information, refer to the **System Setup Tab** topic in this documentation.

7. The Bookmarks tab contains all of the bookmarks that are saved by the user. For more information, refer to the **Bookmarks Tab** topic in this documentation.

8. The STEP Workflow tab contains all of the workflows currently associated with STEP. The toggles can be flipped to show the states associated with each workflow. For more information, refer to the **STEP Workflow** topic of this documentation.

9. Selecting an object in the workbench populates the Object Editor pane with fields and actions based on associated permissions and validity for the selected object. For more information, including the hide (◀) and show (▶) buttons, refer to the **Object Editor** topic in this documentation.

10. **System Information**. The title bar includes important information about the user's system. Displayed are the name of the system, the user ID, and the URL of the system being accessed.

11. **Pushpin** allows users to pin (📌) the right-hand side of the window. The default is unpinned (📌). When pinned, a user can navigate to other items in the Tree or System Setup while the information on the right side of the screen remains unchanged. This can be used to add objects to the Flatplanner basket and to add objects to a change package. For more information, refer to the **Adding Objects Manually to the Basket** topic in the **Print Flatplanner** documentation and the **Editing a Change Package** topic in the **Configuration Management** documentation.

12. **STEP connection status** displays the status of STEP's connection to the internet. When the connection is strong and STEP is ready to run normally, the status will read 'Ready.' Other statuses that may appear are:
    - **Reading**. STEP is requesting information from the database.
    - **Lost Connection to**. STEP has lost connection to the server.
    - **Reconnected to**. STEP has reconnected to the server after a lost connection. May alternate with the **Lost Connection to** status if the connection to the internet is lost for a significant period of time.

13. **Connection strength** is a small graph illustrating the connection strength between the user and the server, also know as the 'Network Latency.' If a user hovers their cursor over the graph, a hover-over display will appear showing how fast data is traveling between the server and the user as measured in milliseconds.

BG Processes Tab

The BG Processes tab shows all active and inactive background processes (BGPs). Activity such as an import, export, bulk-update, collection creation, etc., generates a background process and a log and informs users if the process was successful. In the event of an unsuccessful background process, an error message is displayed showing the reason for failure.

Background processes are based on the type of activity, for example 'Approve recursively,' 'Bulk update,' 'Create Collection,' 'Download Report,' as well as 'Translation,' 'Translation Import,' and 'Unique Key Processes' shown in the image below.

A background process can be in the following states: queued, active, completed with errors, or ended. For details on these states, refer to the **BG Processes States** topic in the **System Setup** documentation.

For information on Background Process Queues, refer to the **Background Processes and Queues** topic in the **System Setup** documentation.

For information on initiating and monitoring BGPs in Web UI, refer to the **Background Process List Screen** topic in the **Web User Interfaces** documentation.

BG Processes Displayed

In the BG Process tab, a user can choose to view only the BGPs that they have initiated, or with the appropriate privileges, they can view all the BGPs run by any user. The display is selected by clicking either the 'Two People and Gear' button or the 'One Person and Gear' button highlighted in the image below.

Two People and Gear (icon) displays all background processes run by any user. This button is enabled by the 'View Background Processes of Other Users' setup action as defined in the **Setup Actions and Error Descriptions** topic of the **System Setup** documentation.

One Person and Gear (icon) displays only the background processes run by the user who is logged in.

Background Process Tab

The Background Process tab in the editor contains:

- The **Properties** flipper includes who started the background process, an auto-generated unique identifier, the type of BGP performed (export, import, bulk update, etc.), status (Succeeded, Failed), creation date and time, start date and time, end date and time, time taken to process the request, number of warnings, and number of error messages.

Background Process	Queue Info	
𝒫 Properties		
Property	> Value	>
Started by	USER1	
Id	BGP_180963	
Description	100703, en-US > German, Tue Jul 05 13:53:00 +0530 2016	

- The **Execution Report** flipper includes detailed information about the process. If the process failed, a message displays the reason.

- The navigation buttons are enabled when until the log reaches over 100 lines.

  - Clicking the ◀| button will navigate back one page.

  - Clicking the ◀◀ button will navigate to the beginning of the log.

  - Clicking the |▶ button will navigate forward one page.

  - Clicking the ▶▶ button will navigate to the end of the log.

- The **Save** button allows the user to download the execution report. Click the 'Save' button to display the 'Save File' window. Browse to the download location, add a file name, and click the 'Save' button. The file can be saved as a CSV or HTML file type. For larger files, CSV files can be zipped.

Note: The 'CSV (Zipped)' option is only available when there are more than one million lines (presented as rows) within the execution report. This is a result of MS Excel having a limitation of one million rows per file; the 'CSV (Zipped)' option allows multiple files to be saved.

- **Truncate** - This button is available only on the 'Ended Processes' node.

  When the Execution Report becomes cluttered or only specific information is needed (errors or warnings), truncating the report permanently removes the unneeded information. Click the 'Truncate' button to display the 'Truncate execution report' dialog.

> **Important:** Once execution report lines are removed via truncate they cannot be recovered.

For example, assume the execution report has 50 lines and a user wants to examine only 16 lines from the report that are errors. With the settings shown in the image above, the user clicks the **OK** button and the execution report retains only the first 16 error lines. All other lines are permanently deleted.

Queue Info Tab

The Queue Info tab in the editor displays the name of the queue being used for the process within the flipper title.

| Background Process | Queue Info |

Queue - MISC

Position >	Process Type >	Process Description >	Process ID >	Started by >	Server >	Progress >	Created >	Started >	Finished >	Processing Time >	Time in Queue >

Bookmarks Tab

The Bookmarks tab allows users to set bookmarks for any objects in the Tree and allows users to easily access these objects without having to search or navigate the Tree.

A bookmark is a Uniform Resource Identifier (URI) that is stored to provide the user with a quick method of retrieving the data at any time.

Bookmarks are accessed via:

1. The Navigate menu using the Bookmarks option.

2. Clicking the Bookmarks tab.

Note: Bookmarks are stored on the local STEP system and are not accessible when logging into STEP from a different computer.

Bookmarks are specific to individual users – just as in a web browser. This means that one user will not be able to view the bookmarks created by another user.

To learn more about bookmarks and maintaining them, refer to the **Bookmarks** topic in the **Navigation and Searches** documentation.

Adding a Bookmark

Standard navigation Bookmarks are used to quickly access specific nodes in the Tree and System Setup hierarchies. These bookmarks save the URL of the currently selected object. Any objects from Tree or System Setup hierarchies can be added with the usage of Bookmarks functionality.

To save an object as a Standard Navigation Bookmark:

1. In Tree, select the item to be bookmarked.

2. On the Navigate menu, select Bookmark > Add Bookmark.

3. The new bookmark is displayed on the Bookmarks tab.

4. Click the new bookmark.

5. Navigate to the Bookmarks main tab, and go to the Product tab on an object to view the bookmark data.

Bookmarks can also be created using a shortcut. Select the object and press **Ctrl+D**. The bookmark is created automatically.

Removing a Bookmark

After saving a Bookmark, it may no longer be needed eventually. There is a right-click menu option that can remove a selected bookmark.

> **Important:** If user deletes a bookmark (Maintain menu > **Delete**), the object is deleted and is moved to the Recycle bin.

No confirmation window displays before removing a bookmark.

1. On the Bookmarks tab, right-click the bookmark to be removed and click Remove Bookmark.

2. The selected bookmark is removed.

Editing a Bookmark

Both Standard Navigation (the link to specific objects) and Search Bookmarks may be edited in the Bookmarks tab. To edit a bookmark:

1. On the **Bookmarks** tab, right-click the bookmark to be modified and click 'Edit Bookmark.'

2. If desired, change the name of the Bookmark then click **OK**.

3. The name will be updated in the Bookmarks tab.

4. The object URL can be edited only if the Edit URL checkbox is activated. In the below screenshot, the product URL has been modified which points to a new product URL.

Similarly, 'Search Bookmark' can be edited by editing the 'Search URL,' if the 'Edit URL' checkbox is edited.

5. Click the **OK** button to save any changes to this bookmark.

Copying a Bookmark to the Clipboard

Bookmarks are direct addresses to a specific object, such as a product, entity, or publication, in STEP. These bookmarks can be shared to other users by copying the bookmark to the clipboard, and then pasting this bookmark to a shareable medium.

1. On the Bookmarks tab, right-click the bookmark to be removed and click 'Copy to Clipboard.'

2. Paste the copied URL of the bookmark (using Ctrl + V on Windows).

The copied URL can be pasted in the URL Field of STEP Workbench, and the user can search the respective objects.

Note: You may send the copied URL to other STEP users so that they can navigate to the object or to the search criteria.

Menu Items

The STEP Workbench menu bar provides access to many aspects of STEP's functionality. Some of the options in these menus are also available via a right-click menu accessible elsewhere in STEP. For instance, users may add a product to a product family by selecting the product family, and then selecting Maintain > Insert > Product in the menu bar, but they may also perform the same action by right-clicking on the product family in the Tree. However, some options, like changing the view target, are only available in the menu bar dropdown menus. Each of the menu bar sections are detailed on subsequent topics.

> **Note:** Many menu options can be used with a keyboard shortcut. For a list of the keyboard shortcuts, refer to the **STEP Workbench Keyboard Shortcuts** topic in the **Getting Started** documentation.

☐ doc-dev - userj@https://doc-dev.stibo.com - STEPworkbench

File Edit View Navigate Format Maintain Window Help

- **File** — The File menu provides access to import and export actions as well as general STEP Workbench tasks, such as running bulk updates, changing passwords, and emptying the Recycle Bin. For more information, refer to the **File Menu** topic.
- **Edit** — In addition to administration actions like copying and pasting, the Edit menu also provides access to tasks like spelling checks, managing assets, and editing unique keys. For more information, refer to the **Edit Menu** topic.
- **View** — The View menu contains options that change how data is displayed in the workbench. For more information, refer to the **View Menu** topic.
- **Navigate** — The Navigate menu contains searching options and the ability to find similar objects. For more information, refer to the **Navigate Menu** topic.
- **Format** — The Format menu allows for setting styles such as bold or italics and inserting character tags. For more information, refer to the **Format Menu** topic.
- **Maintain** — The actions available on the Maintain menu pertain to data maintenance at the object level. Data such as LOVs and attribute values can be merged. Data can also be forcefully deleted, duplicated, or approved. Links and new objects can be created in this menu. For more information, refer to the **Maintain Menu** topic.
- **Window** — The Window menu provides actions for changing the presentation of the STEP Workbench. For more information, refer to the **Window Menu** topic.
- **Help** — The primary function of this menu is to link users to the online documentation. For more information, refer to **Help Menu** topic.

File Menu

The file menu contains actions that are related to maintaining the workbench from a performance level, such as cleaning the recycle bin, purging old revisions, scheduling bulk updates, as well as defining imports and exports.

Each of the options on the File menu are defined below.

Translate

The Translate menu allows users to translate products, classifications, and names of images and documents, product values, index words, LOVs (List of Values), units, attribute names, free text cells in tables in the workbench, and to import translations.

- By selecting 'Data Objects' or 'Setup Objects,' the Request Translation wizard will display. This process results in the creation of a translation file that will include either data objects (objects that contain usable customer data) or setup objects (objects that help organize the data objects). Refer to the **Structured XML Translation** topic for data object translations and **Structured Translation for Setup Objects** in the **Translations** documentation for more information.
- The 'Manual Excel Translation Export' is best used for a specific set of use cases, namely when there is not much content to translate, the translator does not have access to STEP, or the objects to be translated are setup objects. For more information on performing a manual Excel translation, refer to the **Starting a Manual Excel Translation Export** topic in the **Translations** documentation.
- The 'Import Translation' allows users to select an external translation file.
- The 'Change Translation' allows users to change configurations.

For more information on the translate functionality, refer to the **Translations** documentation.

Import

The Import menu contains actions for bringing data into STEP.

- The 'Data...' option loads the Import Manager. For more information, refer to the **Import Manager** topic in the **Data Exchange** documentation.
- The 'eCl@ss' option launches the ECLASS Classification import wizard. ECLASS is used to group materials, products, and services. For information on how to best use ECLASS and its importer, refer to the **ECLASS Format** topic and the **ECLASS Classification Import** topic in the **Data Exchange** documentation.
- The 'Images & Documents...' option, while on a Tree node that contains assets (images and documents), will load the Import Images and Document wizard. For more information, refer to the **Import Images and Document Wizard** topic in the **Digital Assets** documentation.

- The Business Rule from Editable Format allows users to manually import business rule definitions in the editable format described in the **VCSI: Editable Business Rules Format** topic of the **Configuration Management** documentation.

Export

The Export menu contains actions for getting data out of STEP for external management.

- The 'Data...' option loads the Export Manager. For more information, refer to the **Export Manager** topic of the **Data Exchange** documentation.
- The 'Schedule Data Export...' allows you to create a data export that executes at a specific time or repeatedly. This option starts the **Schedule Data Export** wizard. For more information, refer to the **Scheduling a Data Export** topic in the **Data Exchange** documentation.
- The 'Images & Documents...' option, while on a Tree node that contains assets (images and documents), loads the Export Images and Document wizard. For more information, refer to the **Export Images and Documents Wizard** topic in the **Digital Assets** documentation.
- The 'Compare System Setup Exports' option enables you to migrate systems and allows users to determine which items should not be added to the new system. This option will compare two STEP XML files that are exported from two STEP systems, such as a production system being compared with a development system.

Reports

Selecting 'Reports' option will load the Reports wizard.

For more information on the reports wizard, refer to the **Reporter** documentation.

Bulk Update

Bulk updates allow you to perform one or more actions on multiple objects at the same time.

- The 'Run Bulk Update' option will start the Bulk Update wizard.
- The 'Schedule Bulk Update' option will allow users to create repeatable bulk updates.

For more information, refer to the **Creating a Bulk Update** topic and the **Scheduling Bulk Updates for Collections** topic in the **Bulk Updates** documentation.

Schedule Category Profiling

Category profiles (also called data profiles) are used to take a snapshot of data that would be displayed in the category profile tab. This snapshot does not update as new changes are made. With this action, the 'Schedule Category Profiling' wizard will display and users may schedule the updates of existing profiles and the ability to

copy profiles as well. For more information, refer to **Generating, Updating, and Scheduling a Data Profile** topic in the **Data Profiling** documentation.

Business Module Manager

A business module is a functional configuration which handles use cases based on common practices observed in the industry. The Business Module Manager allows an administrator to install a pre-configured data model for a business purpose, such as the 'sell side' of the product enrichment process, or the 'buy side' for the vendor data onboarding process. Business module installation can include the creation of product objects types, classification objects, lists of values types, etc. The 'Business Module Manager' option displays on the File menu for all users. The install functionality is available for users who are assigned the 'Install Business Modules' setup action privilege.

For more information, refer to the **Business Module Manager** topic in the **System Setup**.

Save

While saving in STEP Workbench is automatic, the Save option allows users to force a save without leaving a field.

Change Password

During any session, any user may change their own password. Enter your current password in the 'Old Password' field, then enter the new password twice in the 'New Password' and 'Retype Password' parameters. Click 'Save' to complete the update or 'Cancel' to leave the password unchanged.

Empty Recycle Bin

This action purges the 'Not In Use' objects in the Tree Recycle Bin. For more information, refer to the **In Use and Not In Use Objects** section in the **Approval of Objects** topic of this guide.

Select the 'Empty Recycle Bin' option to display the Confirm Purge dialog. The number of items that will be removed is displayed. Click 'Purge' to permanently delete the items, or 'Cancel' to leave the Recycle Bin unchanged.

This action is also available via by right-clicking on the recycle bin.

Empty Recycle Bin Before

This action allows users to purge the recycle bin of anything created before a specified date.

This action is also available via right-clicking on the recycle bin.

Purge Old Revisions

This is a global purge of revisions contained within a specified workspace. A further description of this functionality is available in the **Revisions** section of the **System Setup** documentation.

Check integrity of external assets...

Assets can be stored in a file system on the STEP application server rather than in the STEP database itself. This can reduce the size of the database significantly, and for DTP tools depending on having the referenced high-resolution images directly available on the file system, replication from DB to file system of these images can be avoided.

This option is disabled by default. To enable it, follow the steps defined in the **Initial Setup for an External File Structure** topic of the **Digital Assets** documentation.

The 'Check integrity of external assets...' option is enabled on systems set up to store images in a file system and not in the STEP database. If a Classification is selected, the user can click this menu item to examine if all images in the selected classification have been successfully migrated from the database to the file system.

The integrity of the file system for storing digital assets can be double-checked by selecting one or more classifications and then select 'Check integrity of external assets' in the File menu. This starts a background process reporting if any assets are missing or have been changed against expectations.

When errors are found, the assets with wrong or missing content are added to a collection and the URL of this collection is referenced directly from the execution report of the background process.

A check of approximately 10,000 asset files on standard hardware can complete after one minute. Thus, expect that the integrity check might take some time on systems with many assets.

Pre-generate Thumbnail Cache...

This option will generate thumbnail cache of images and documents manually. This action allows any selected image or images in a classification folder to display as thumbnails without having to wait for them to generate.

For example, on the Image and Documents tab of a classification folder, if the image thumbnails are delayed in displaying, then Pre-generate Thumbnail Cache from File menu can be run to generate them in a background process.

For more information, refer to the **Image Cache Processing Plugin Parameters and Triggers** topic in the **System Setup** documentation.

This option is disabled by default. To enable it, ask an authorized user (one with the Setup Action = Maintain System) to perform the following steps.

> **Note:** Although this automates the loading process, there will be delays during upload.

1. Under 'System Setup' tab, navigate to 'Users & Groups.'
2. Select 'System Settings' tab.
3. Go to 'Image & Document Settings' flipper.
4. Set 'Pre-generate thumbnail cache on upload' = Yes. On upload of image or document, the thumbnail will be generated automatically.

For more information, refer to the 'Pre-generate Thumbnail cache on upload' section of the **Images and Documents Settings** topic in the **System Setup** documentation.

Close Window

This option closes the active workbench window.

Exit STEPworkbench

This will exit the STEP Workbench completely by closing all active windows.

Edit Menu

The Edit menu allows for typical text editing actions, asset editing actions, unique key editing, and spell check.

↰	Undo	Ctrl+Z
↱	Redo	Ctrl+Shift+Z
✄	Cut	Ctrl+X
📋	Copy	Ctrl+C
📋	Paste	Ctrl+V
📋	Paste and Match Style	Ctrl+Shift+V
📋	Paste Link	Ctrl+L
	Select All	Ctrl+A
	Spelling	>
	Asset	>
	Edit Unique Key Values	
	Remove Row(s)	Ctrl+Minus
	Insert Row	Ctrl+Plus

Undo

This action reverses the last action of the user.

Note: It does NOT restore character-by-character changes in text editors.

Redo

Once an action is undone by selecting 'Undo', a user can then select 'Redo' to repeat the action.

Cut

Standard 'cut' operation to remove the selected characters.

Copy

Standard 'copy' operation to duplicate the selected characters.

Note: If a folder is copied, the subfolders will NOT be copied.

Paste

Standard 'paste' operation to insert the copied characters at the selected point.

Paste and Match Style

Once something is copied or cut, this will paste with STEP styles associated with the copied / cut text. For more information, refer to the Style tag section of the **Tags** topic of the **System Setup** documentation.

Paste Link

Allows the copied object to be linked into another object (e.g., linking an attribute into a second attribute group). Creates a new instance of the same object (not a copy), just in a different location.

For example, if a user has an image for a product line that will live under multiple parents, the Paste Link action can be used. The user selects the asset, and then selects another location that will serve as a parent object. The paste link option can be used to create a link, giving this object two parents. This action will not work on products as products can only have one parent.

Some considerations with this action are:

- an attribute must exist in at least one attribute group,
- if the data must be shown in the Web UI, then an attribute for display purposes should be created

Note: The Paste option is available based on the selected node. For example, when selecting a product node and placing it into a classification folder, only the 'Paste Link' option is available. However, if a product is to be moved to another product family, when selecting the target family after cutting the original product, 'Paste Link' is disabled.

Select All

Standard 'select all' operation to mark all visible objects for another action, like copying or deleting.

Spelling

Allows a user to check the spelling of available text.

When the 'Automatic Spell Check' option is selected, as users type, incorrectly spelled words are displayed in red text.

Name			Value	
> Family Description		abc	This *itmes* is *avalable* in multi *coolors*	
> Brand Name		abc	Hanes	
> Product Name		abc	Hanes Beefy-T Short-Sleve T-Shirt	

If the 'Automatic Spell Check' is disabled, then selecting the 'Spell Check' action while in a field checks that field's spelling. If a user selects one of the incorrectly spelled words and navigates back to the Spelling menu, STEP will offer possible spelling corrections.

Spelling
Asset
Edit Unique Key Values

Remove Row(s)   Ctrl+Minus
Insert Row   Ctrl+Plus

Automatic Spell Check
Spell Check

available
avalanche
availably
salable
assailable

Name			Value	
> Family Description		abc	This *itmes* is *avalable* in multi *coolors*	
> Brand Name		abc	Hanes	
> Product Name		abc	Hanes Beefy-T Short-Sleve T-Shirt	

Asset

When an asset is selected in Tree, the 'Asset' menu shows various options to manage and change assets.

Asset
Edit Unique Key Values

Remove Row(s)   Ctrl+Minus
Insert Row   Ctrl+Plus

Edit Asset
External Viewer
Replace Asset Content
Create Local Content of Asset
Update System Properties
Delete Local Content of Asset

Note: If no object is selected or a non-asset node is selected, all of the 'Asset' menu options are disabled.

- The 'Edit Asset' action will open the asset in the program that is associated with the selected file type, like Adobe Acrobat for PDFs.
- The 'External Viewer' will open the asset in a program on the user's local computer.
- The 'Replace Asset Content' action will allow users to replace the asset with local assets.
- The 'Create Local Content of Asset' option initiates an asset push and downloads the asset.

- The 'Update System Properties' action refreshes the asset's system properties in the 'Images & Documents' tab of the asset.
- After selecting the 'Create Local Content of Asset' action, the 'Delete Local Content of Asset' option is enabled and allows a user to delete that downloaded asset.

Edit Unique Key Values

Unique Keys provide a special way of designating objects for identification outside of STEP. Selecting the 'Edit Unique Key Values' action on an object with active unique keys will display the 'Edit Unique Key Values' dialog, allowing users to edit any unique key related attributes on the object.

If there are no active unique keys for the selected object, then the following message displays.

For more information, refer to the **Unique Keys** topic of the **System Setup** documentation.

Remove / Insert / Add Options

At the bottom of the Edit menu are two options that will change based on the selected node or current view. The following are a sampling of what may appear:

On attribute references

On the sub-products tab of a Product object

Remove Row(s)	Ctrl+Minus
Add Product	**Ctrl+Plus**

On Lookup tables

Remove Row(s)	Ctrl+Minus
Add Row	**Ctrl+Plus**

The options will allow users to add or remove to the selected node as desired.

View Menu

The View Menu's purpose is to change the way a user views objects in the STEP system. In this menu, users may change the viewable workspace, context, and mode, add a filter, change the primary hierarchy, and other options to customize the view to their needs.

> **Note:** This menu does not edit or change any of the values. For more information to edit these values, refer to the **Maintain Menu** topic of this documentation.

Mode	>
Context	>
Workspace	>
Source	>
Filter	>
Primary Hierarchy	>
Select version	>
New View	
Remove view	>
Product views	>
Show Source Context	
Rotate Table	
Reload	F5
Collapse Tree	
Disable calculated values	
Default Font Size	
Choose User Display Sequence Attribute	
Toggle Show Hidden Background Process Templates	
Default Context	>
Logs	>

Mode

The 'Mode' sub-menu includes options that allows the user to view STEP data in a variety of ways, dependent on the need. These options are mirrored on the toolbar. For more information, refer to the **Toolbar** topic in this documentation.

- **Normal** mode is the view where the majority of object maintenance occurs. From the toolbar, it is represented with the 🔲 icon.

- **Translation** mode shows the split view of the different contexts for objects. To use the Translation mode, select a Source context from the View menu. From the toolbar, it is the 💬 icon. Online Translation can be done from this Translation Tab. Fields highlighted in green color can be translated within STEP from this Translation Mode. For more information on translating data into other languages, refer to the **Translations** documentation.

- **Workspace** mode shows a comparison of values between Main and Approved workspaces using the 🖥 button. For more information on workspaces, refer to the **Workspaces** topic in the **System Setup** documentation.

- **Context** mode shows a comparison of values between different contexts. From the toolbar, it is the 🔲 icon. For example, this will allow a user to view values for all languages or for all price versions. For more information on contexts, refer to the **Contexts** topic in the **System Setup** documentation.

- **Revision** shows a comparison of values between different revisions. From the toolbar, it is the 🔲 icon. If you have selected any object in STEP, then switched to the revision view, it will show a comparison screen of the two latest revisions. The latest revision is displayed in the first column and the older revision is displayed next. These revisions are also listed under the Status tab in a product editor. For more information on managing revisions, refer to the **Revisions** topic of the **System Setup** documentation.

- **Update** shows a comparison between objects across workspaces (Approved and Main) and allows the user to update the object in the current workspace from a source workspace.

Context

When an object is selected, 'Context' displays all available contexts in a dropdown. By selecting one of these contexts, the viewed context for the current object and all other objects, is changed to the selected context.

Workspace

Workspace shows all available workspaces. It is possible to change the viewed workspace and view objects as they appear in different workspaces. In this example, there are only two workspaces: Main and Approved. However, more can be added as desired. For more information on setting up and using workspaces, refer to the **Workspaces** topic in the **System Setup** documentation.

In the toolbar next to the context selector, the toggle allows you to switch between the Main ( ) and Approved ( ) workspaces.

Target / Source

The 'Target' and 'Source' sub-menu allows users to choose alternative dimensions to show in the Context mode.

Depending on the view chosen, this function label changes from target to source.

- In the Translation view, this allows the user to select the source language.

- In the Workspace view mode, this allows the user to select the target workspace.

- In the Context view mode, this allows the user to select a single target as context or multiple contexts to compare the content.

- In the Revision view mode, this allows the user to select a past revision(s), provided there is a recorded change in STEP. If the revisions are older than the current session, the 'Other' option will display a window to select necessary revision for comparison. When the Revision view is selected, the selected object will show the current version and the immediately previous version. By using target, users may select specific revisions for comparison.

- In the Update view mode, this allows the user to select the source workspace.

Filter

Select a view to filter out empty attribute values, show only mandatory attributes, show only editable attributes, and/or show only legal attributes.

Primary Hierarchy

An object may be located in multiple hierarchies. When locating objects, there may be a reason that a user wants the object's path to specify one of those hierarchies instead of all the applicable hierarchies. Changing this view can be done by switching the primary hierarchy view used for workbench. This path is displayed in the object details within workbench, but the path is also used when navigating to an object via a search results set.

For example, object 12345 is in a supplier hierarchy and a primary product hierarchy. When doing a search for object 12345, upon clicking the 12345 link in the search results, User A wants the object to be displayed in the Tree within the primary product hierarchy. User B wants to click on the 12345 link and be taken to the object within the suppliers hierarchy. Both scenarios can be accommodated when each user sets their own view.

An objects' path can be changed based on the selected primary hierarchy. To change the display view, select Primary Hierarchy from the View menu, and then select the desired hierarchy. For many, the Primary Product Hierarchy will be the default selection.

In the below example, Object 0726222 is a product object type being viewed in the Primary Product Hierarchy. This path echos the location of the object in the Tree tab.

Examples of how objects will be displayed can be demonstrated with the Merchandising Hierarchy selection. Notice the changed path and the object's location in the Tree tab.

Select Version

Allows the user to set the default publication or version used for proofing.

New View

Select multiple products from Tree to enable this option and display a multi-editor tab where a view can be used. Views are not valid with non-product object types. Multi-Editors and views are defined in the **Editing Objects in the Tree Tab** topic. A view allows a user to customize the attributes shown for more than one object, instead of displaying all attributes for all selected objects.

Remove View

Select multiple products from Tree to enable this option and display a multi-editor tab where a view can be used. Views are not valid with non-product object types. Multi-Editors and views are defined in the **Editing Objects in the Tree Tab** topic. A view that is no longer needed can be remove with this menu option.

Product Views

Select multiple products from Tree to enable this option and display a multi-editor tab where a view can be used. Views are not valid with non-product object types. Multi-Editors and views are defined in the **Editing Objects in the Tree Tab** topic. The Product Views option displays all saved views.

Show Source Context

Attribute names may be translated. This option allows a user to view attribute values in both a foreign language and in the source language.

Rotate Table

This will flip the selected table so that the columns become rows and vice versa. This is most often used in a multi-product editor.

Reload

Retrieves updated information from the database including other users' changes.

Collapse Tree

Collapses the folders in the Tree navigator.

Disable calculated values

Disables the automatic calculation of calculated attributes. This will make the STEP interface load faster.

If **Disable calculated attributes** is checked, calculated attributes can be rendered one-by-one by clicking the **Calculate button** on a calculated parameter in the product editor.

Default Font Size

Allows the user to change GUI font.

Choose User Display Sequence Attribute

Allows the user to select a user-specific Display Sequence Attribute. This option is different from the Attribute set under Users & Groups in System Setup. For more information on using Display Sequence Attributes, refer to **Display Sequence Attribute** topic in the **System Setup** documentation.

Toggle Show Hidden Background Process Template

Once selected, any previously hidden Background Process Template will display.

Default Context

Sets the default context used when logging in.

Logs

Displays Workspace and System Setup logs.

Navigate Menu

The Navigate menu offers options for moving around the workbench.

Search

The 'Search' action accesses the 'Search' tab, which displays along the left side of the workbench window. Using the search functionality, users may perform a search of all of STEP objects. For more information on searching within STEP, refer to the **Navigating and Searching** topic in this guide.

Search Below

Only after selecting an object will the 'Search Below' action become selectable. Once this option is selected, the 'Search' tab will perform populate with a 'Search Below' for that object. Click the Search button to perform this query.

Goto

A quick way to jump to a particular object in the database based on the name, ID, or Unique Key value. A dropdown displays multiple results and allows the user to select the desired object.

Goto Next

When there are multiple 'Goto' results (or typeahead results) from the 'Goto' function, the user can opt to select 'Goto Next' to continue on to the next result.

When multiple items meet the criteria for a Goto action, the 'Goto Next' action will cycle to the next object in that list, which is ordered by STEP IDs.

Goto Next will be disabled if the previous Goto command has not been used.

Back / Forward

The 'Back' and 'Forward' actions will function the same as most web browsers. 'Back' allows users to go to a previously visited screen, and 'Forward' returns to the screen from which a user went back.

Bookmarks

The Bookmarks sub-menu allows a user to bookmark the currently displayed object or create and name a search based on the selected object.

Find Similar Product

The Find Similar Product option populates a search based on the attributes and its values of the selected product. When this option is selected, a window will appear prompting the user to check off common attributes to search for.

Important: Attribute values from calculated attributes and inherited attribute values are not searched

Note: The 'Please Select Attributes' dialog shows only the attributes which have values (inherited from context, inherited from hierarchy, local values, and calculated values).

When the attributes are selected, click the 'Select' button, and the user is redirected to Search Tab, which is populated with the Object type and selected attributes with its values.

After clicking the 'Search' button, the selected product(s) which match the search criteria are displayed.

Search

Object Type ▼ ☒
Object Type = Product

Search ▼ ☒
Search: (BrandName) = Hanes

Search ▼ ☒
Search: (BrandOwner) = HanesBrands

➕ ▼   Reset   Search

Displaying 1 of 1 results   Show Details

Name	>
> 🗂 **Cotton T-shirts** *ID = 18209*	

◀

Search Result Profiling

1 hit(s)
Click links to narrow down search

Results by Object Type

Product (1) - exclude

📁 Item Family (1) - exclude

Results by Position in Tree Hierarchy

Results by Parent

📁 Products (2) - exclude
📁 T-shirts Items (1) - exclude

Note: This search is recommended for externally maintained attributes with validation base types of Text, LOV, and Numeric. It is not recommended for attributes with validation base types like Number, URL, Date, Condition, Multivalued Text, or Multivalued LOV, etc.

Format Menu

The Format menu contains items for stylizing and transforming text in the workbench.

Style

This option allows setting either bold or italics. Users may create their own styles, which will show in this menu.

Users can apply style formatting to selected strings of text such as bold, italics, or custom style tags. The secondary 'Style' menu contains a list of additional styles. Selecting any will change the selected text. To add more styles to the list of options, refer to the **Tags** topic in the **System Setup** documentation.

Selecting 'Other' from the extended Style menu displays a bank of all the custom styles in the STEP system.

> **Note:** Formatting is limited to free text fields.

In this example, bullets are applied to the Long Description field. The word 'flash' is bold.

Clear All Styles

This action clears all applied styles on the selected text.

Character Tag

The 'Character Tag' action allows for the insertion of custom-made character tags.

To learn more about editing character tags, refer to the **Tags** topic in the **System Setup** documentation. In the example below, a phone character tag is used, followed by a line break, and then a multi-item separator.

Selecting 'Other' from the character tag menu displays a bank of all the character tags in the STEP system.

Insert Special Character

This is an embedded character map. It shows the most recently used characters and offers a complete Unicode character range.

Selecting the 'Insert Special Character' option displays a pop-up of the most recently used symbols.

Selecting the 'Other...' option on this pop-up will generate another dialog that allows for selecting all of the special characters, as well as changing the character set to choose from.

Insert Special Character

Most Recently Used Symbols

| @ | £ | $ | | | | | |

Unicode Character Block: Basic Latin

All Special Characters

	!	"	#	$	%	&	'
(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7
8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G

Insert   Cancel

Maintain Menu

Maintain menu provides the user to maintain STEP data by inserting, linking, merging, deleting, approving and others. Some options, such as Customer MDM Monitoring and User Anonymizer, are only available if the functionality is activated via a license and/or add-on component. Many options have additional actions and are explained below.

Insert		>
Link		>
Merge		>
✕ Delete		
Force Delete & Purge		
Unlink Object Type		
🗐 Duplicate	Ctrl+J	
🗐 Duplicate Recursively		
Make Revision		
Approval		>
Enable group for workflows		
Revive		
Revive Recursively		
Truncate log...		
CMDM Monitoring		>
User Anonymizer		

Insert

The 'Insert' action allows the user to create an object based on the currently selected object. The options are disabled based on the selection.

> **Note:** Right-click an appropriate Tree hierarchy node to create products, classifications, entities, publications, and assets. For more information on object creation, refer to the **Creating Objects in the Tree Tab** topic of this guide.

Insert		Product	Ctrl+Shift+P
Link		Classification	Ctrl+Shift+C
Merge		**Classification Root**	**Ctrl+Shift+R**
		New Entity Node	
Delete		**Entity Root**	
Force Delete & Purge		New Publication...	
Unlink Object Type		**New Publication Group**	
		New Publication Section...	
Duplicate	Ctrl+J	New Page Template ...	
Duplicate Recursively		Orphan Attribute	Ctrl+Shift+O
		Asset	Ctrl+Shift+A
Make Revision		Attribute	Ctrl+Shift+T
		Attribute Group	Ctrl+Shift+I
Approval		List of Values	Ctrl+Shift+L
Enable group for workflows		Dimension	Ctrl+Shift+D
		Dimension Point	Ctrl+Shift+M
Revive		Action Set	Ctrl+Shift+S
Revive Recursively		New Image Conversion Configuration...	
		Create Transformation Lookup Table	
Truncate log...		**New Event Queue**	
		New AssetPush Event Queue	
		New AssetPush Configuration	
		STEP Workflow	Ctrl+Shift+R
		Background Process to Monitor Deadlines	Ctrl+Shift+D
		User	
		Group	Ctrl+Shift+G
		New Supplier	
		Create Package	
		Create STEP Workflow	Ctrl+Shift+R
		New Business Condition	
		New Business Action	
		New Business Function	
		New Business Library	
		Setup Group Root...	

The following options are available in the Insert sub-menu:

- **Product** – If the user is within the primary product hierarchy, this option creates a new product beneath the selected hierarchy.
- **Classification** – If the user selected a classification hierarchy, this option allows creation of a new classification folder beneath the selected classification with the predefined classification object types.

- **Classification Root** – If the user would like to have a classification root to store images or configurations or to link products in the classifications folder, this option creates a classification root with a set of predefined classification root object types that are listed.
- **New Entity Node** – If the user selected an entity root, this option creates a new entity object based on one of the predefined entity types.
- **Entity Root** – A new 'Entity Root' can be created in the tree hierarchy from predefined set of entity root object types.
- **New Publication...** – Allows the user to create a new publication. If the user has already selected a publication hierarchy, this option displays the 'Create Publication' dialog with the default object type selected. The user must provide a name of the publication and 'Page Template,' 'Product Template,' and 'Publication Template' to create a new publication.

> **Note:** The 'Create' button in the 'Create Publication' dialog is enabled only if the user has selected a publication template.

- **New Publication Group** – Allows the user to create a new publication group within the selected publication group. If a publication group is selected, this option displays the 'Create Publication Group' dialog with the predefined set of object type.
- **New Publication Section...** – Allows the user to create a 'New Publication Section' from the 'New Section' dialog. Complete the Section Name and select the Page Template from the dropdown list.
- **New Page Template...** – Allows the user to create a new page template. After selecting a 'Publication Group,' this option displays the 'Create New Page Template in STEP' wizard.
- **Orphan Attribute** – This allows the user to add an attribute as an orphan attribute to a product by searching or browsing from System Setup tab. For information, refer to the **Linking Orphan Attributes** topic in the **System Setup** documentation.
- **Asset** – Allows the user to create placeholder with ID and name for a new asset on the selected classification folder. The user may choose an asset object type from the Create Asset dialog, then asset content can be added.
- **Attribute** – Allows the user to create a new attribute in the selected attribute group in System Setup.
- **Attribute Group** – Allows the user to create a new attribute group in System Setup.
- **List of Values** – Allows a user to create new list of values under Lists of Values Group / LOVs in System Setup. The user can add ID and Name in the 'Create LOV' dialog.
- **Dimension** – This option creates a new dimension when a user selects the 'Contexts' node in the System Setup. For more information on dimensions, refer to the **Dimensions, Dimension Points, and Contexts** topic in the **System Setup** documentation.
- **Dimension Point** – Allows the user to create new dimension point. A user must select a dimension under System Setup > Contexts > Dimension (for example 'Language'). The label of this option changes dynamically based on the selection of dimension, so the option 'Dimension Point' is never displayed. For example, if the user has chosen 'Language' as Dimension, this option is labeled 'New Language'.
- **Action Set** – This option creates a new setup or user action. A 'Create Action Set' dialog displays with ID and Name to be filled when user selects the option Action Set. Creating a setup or user action is based on which node is selected in System Setup. For more information on action sets, refer to the **Maintaining Action Sets** topic in the **System Setup** documentation.

- **New Image Conversion Configuration…** – A wizard displays to create new image conversion configuration and save it for reuse in the selected classification folder. For more information on image conversions, refer to the **Image Conversion Configuration** topic in the **Digital Assets** documentation.
- **Create Transformation Lookup Table** – Allows the user to create a transformation lookup table under the selected classification. For more information, refer to the **Transformation Lookup Tables** topic in the **Resource Materials** online help.
- **New Event Queue** – The user can create a new event queue in System Setup. For more information, refer to the **Creating a New Event Queue** topic in the **System Setup** documentation.
- **New Asset Push Event Queue** – The user can create a new asset push event queue in System Setup and it creates a new event queue. The event queue can have any number of asset push configurations running from it. For more on assets push events, refer to the **Creating and Maintaining Asset Push Event Queues** topic in the **Digital Assets** documentation.
- **New Asset Push Configurations** – A new asset push configuration is created under the selected Asset Push Event Queue. For more on assets push configurations, refer to the **Creating and Maintaining Asset Push Configurations** topic in the **Digital Assets** documentation.
- **STEP Workflow** – This creates a new workflow under System Setup > Workflows when the user first selects 'Workflows' in 'System Setup'. The STEP Workflow designer window displays. The user can also create a workflow by right-clicking on the 'Workflows' folder. For more information on workflows, refer to the **Workflows** documentation.
- **Background Process to Monitor Deadlines** – When first selecting the System Setup > Workflows node, this option starts a background process for checking STEP Workflow items that have exceeded their deadlines.
- **User** – Users are created by first selecting System Setup > Users & Groups > Group where the user belongs. When a user selects a Group and selects this option, the 'Enter New User' dialog displays. For more information on users in STEP, refer to the **Working with Users** topic in the **System Setup** documentation.
- **Group** – Groups are created by first selecting System Setup > Users & Groups > and selecting the necessary node to hold the group. For more information on groups in STEP, refer to the **Working with User Groups** topic in the **System Setup** documentation.
- **New Supplier** – Supplier users are created in System Setup > Supplier Group. A new supplier can be created by first selecting the supplier group.
- **Create Package** – Creates a package by first selecting System Setup > Change Package. After the user has selected the change package option, a 'Create Change Package' dialog displays. Enter an ID and Name of the Package. For more information on packages, refer to the **Change Packages** topic in the **Configuration Management** documentation.
- **New Business Condition** – Creates a new business condition under Global Business Rules in System Setup. Business Conditions can also be created under Workflows in System Setup. For more information on business conditions, refer to the **Business Conditions** topic in the **Business Rules** documentation.
- **New Business Action** – Creates a new business action in System Setup under Global Business Rules. Business action can also be created under Workflows in System Setup. For more information on business actions, refer to the **Business Actions** topic in the **Business Rules** documentation.
- **New Business Library** – Creates a new business library in System Setup under Global Business Rules. Business libraries can also be created under Workflows in System Setup. For more information on business libraries, refer to the **Business Libraries** topic in the **Business Rules** documentation.
- **Setup Group Root...** – Creates a new setup group root under System Setup. When the user selects this option, the 'Create Setup Group Root' dialog displays with a set of object types. The user may create a new setup group root based on the object the object type selected.

Link

The 'Link' action provides a list of object or reference types for linkable actions. This menu only shows the relevant options as active if it is available for the selected object.

Based on the source object there are different link options available with keyboard shortcuts shown in the above screenshot.

- When a user selects a product hierarchy and clicks on Link > Product, the product is linked to the selected product via a product reference type dropdown.
- When a user selects a product hierarchy and clicks on Link > Asset, the asset is linked to the selected product via an asset reference type dropdown.
- When a user selects an attribute, it can be linked to classifications.
- When a user selects a classification, it can be linked to products.
- When a user selects an attribute, it can be linked to products.

For more information on linking your attributes to products, refer to the **Creating a Product Attribute Link** topic in the **System Setup** documentation.

Merge

Depending on the selected object, the user can merge attributes, LOVs, and LOV values. For more information, refer to the **Merging Attribute Values** topic, the **Merging Values in an LOV** topic, or the **Merging LOV Values in Bulk** topic in the **System Setup** documentation.

Delete

The 'Delete' action sends items to the Tree Recycle Bin. If the selected item for deletion contains child objects, the user receives a warning that these items will also be deleted. For more information, refer to the **Recycle Bin for the Tree Tab** topic of this guide.

> **Note:** The keyboard 'Delete' button does not delete objects in STEP Workbench.

Force Delete and Purge

Selecting an object in the workbench and clicking 'Force Delete and Purge' displays the 'Confirm Force Delete and Purge' dialog. Click the 'Force Delete and Purge' button to permanently delete the object and purge it from the recycle bin without any further opportunity to cancel or revive the object and without generating an event.

The Force Delete and Purge option is also available on the right-click menu when selecting the Tree Recycle Bin, as defined in the **Recycle Bin for the Tree** topic. This clears unnecessary data already in the recycle bin quickly, without going through the various 'approve deletion' actions (if required), and errors reported about existing references or events on queues.

Unlink Object Type

When in System Setup, this option allows a user with the appropriate privileges to unlink the selected object type from its parent.

Duplicate

This standard 'duplicate' operation essentially copies and pastes in one click. Users may also right-click while selecting multiple objects and duplicate each of them. A prompt for a new ID is displayed when an auto ID is not set, then automatically provides a different name. The user is also allowed to indicate if duplicate references should be created.

Duplicate Recursively

A hierarchy can be duplicated when the user selects the top node in the hierarchy and clicks 'Duplicate Recursively.' The ID should be editable to duplicate recursively since duplicate IDs for the same object type are not allowed.

In the below example, the ID is auto generated so the duplicate recursively background process ultimately returns an error.

Make Revision

Allows a user to force a revision on a product and provide a comment for explanation.

Approval

The approval options allow objects to be moved to the Approved workspace.

- **Approve Object** – Approves an object from the Main workspace to the Approved workspace and changes the red X (✖) to either a green checkmark (✔) or a yellow one (✔). Refer to the **Approval of Objects** section of this guide for more information.
- **Partial Approval** – Approve selected parts of the unapproved changes on the selected object.
- **Check Approve** – The 'Check Approve' action allows the user to refer to if anything is barring successful approval of an object. In the example below, mandatory values are missing.

Unable to approve product ✕

Approve report for 18217-012
Unable to approve object due to missing mandatory values on attribute(s):
Brand Owner

OK

○ **Approve Deletion** – For an approved object to be removed from the Recycle Bin, the object must be Approve Deleted. If a previously approved object is deleted, in the Recycle Bin it displays a red '(in Use)' header:

20709 rev.0.9 Deleted (in Use)

Performing an Approve Deletion changes the header to 'Not in Use' and allows the object to be deleted.

20709 rev.0.9 Deleted (Not in Use)

For more information, refer to the **In Use and Not In Use Objects** section in the **Approval of Objects** topic of this guide.

○ **Approve Recursively** – Launches a workflow process that approves the currently selected object and all of its children.

Enable Group for Workflows

This is a disabled legacy option.

Revive

Revives a deleted object, either 'In Use' or 'Not In Use', from the Recycle Bin. For more information, refer to the **In Use and Not In Use Objects** section in the **Approval of Objects** topic of this guide.

Revive Recursively

Revives a deleted object as well as all of its children, both 'in use' and 'not in use', from the Recycle Bin. For more information, refer to the **In Use and Not In Use Objects** section in the **Approval of Objects** topic of this guide.

Truncate Log

Once selecting an Event Queue or Asset Push Queue, this option reduces the log to the most recent entries. For more information, refer to the **Event Queues** topic of the **System Setup** documentation.

Customer MDM Monitoring

Selecting the 'Start background process for monitoring Customer Data Policies' option under Customer MDM Monitoring manually initiates any of the active data policies in the system. For more information, refer to the **Data Policies** topic in the **Data Governance** documentation.

User Anonymizer

This option is available to admin users and is used to anonymize a deleted user within the object change logs, revision logs, and workflow status logs. For more information, refer to the **User Anonymizer** topic in the **System Setup** documentation.

Window Menu

The Window menu offers actions around the STEP Workbench window.

New PIM Window

This action will create a new instance of the STEP Workbench.

Goto Window

This is a legacy option and no longer functions.

Goto Dashboard

This option will display the STEP Workbench dashboard.

New Item Creation by State	Average Time in State	Object Type Count
STEP Workflow profile is unavailable	STEP Workflow profile is unavailable	Profile generated Tue Jan 26 2016 15:03 in context 'English US', workspace 'Main'

Object Type Count

- Item (79)
- Sales Item (69)
- Item Folder (25)
- Level 3 (23)
- Level 2 (21)
- Other object types (105)

Translation Status

Profile generated Tue Jan 26 2016 15:03 in context 'English US', workspace 'Main'

- Not Translated (322)

Flex Fit

Profile generated Tue Jan 26 2016 15:03 in context 'English US', workspace 'Main'

- Yes (6)
- No (1)

Average Object Completeness

No data available for context 'English US', workspace 'Main', completeness metric with ID 'Completeness Metric B'

Number of Items in Workflow State

STEP Workflow profile is unavailable

Zoom Window

This action will center the STEP Workbench on your primary display.

Help Menu

The Help Menu has two options: 'Help' and 'About STEP'.

Help

The 'Help' option opens the STEP documentation in your default web browser.

If configured to authenticate, you will be prompted to enter a STEP username and password before online help is displayed. To enable this functionality, the property `OnlineHelp.Documentation.Authentication.Enabled=true` must be added it to the sharedconfig.properties file. Authentication is disabled by default.

Note: The authentication option will not work with any Single Sign On (SSO) solutions other than LDAP.

You are here: Welcome to Online Help

Welcome to Online Help

When you are done with online help, you should click the Logout button located on the far right of the online help toolbar. Upon logging out, you will be taken back to the documentation login screen.

If authentication is disabled, the Logout button will still display. In this scenario, clicking on the button will take you to the STEP Online Help welcome page.

About STEP

The 'About STEP' option displays the workbench introductory window.

Object Editor

When an object is selected from the left panel in STEP (e.g., Tree tab, System Setup tab, etc.), the right panel displays details on the first tab for the selected object. The left panel can be hidden or displayed by clicking the hide (◀) and show (▶) toggle buttons.

The kind and number of tabs will vary depending on the selected object. However, all objects will have at least an ID, Name, Object Type, Revision, Approved, Translation, and Path. These fields are called 'aspects.'

Refer to the **Object Maintenance in the Tree Tab** topic within this guide and child topics for additional information on the various object editors available in Tree.

Information on editing non-Tree objects can be found within the relevant sections throughout the documentation (e.g., information on workflow editors is available within the workflows guide).

For the product objects in STEP, users can create attributes (description attributes) along with aspects in the first flipper called 'Description.' For more information about description attributes, refer to the **Description Attributes** topic in the **System Setup** documentation.

Search Tab

The Search tab allows users to perform simple searches by typing directly into the default search field.

Users can also perform more complex searches by selecting and/or combining additional search criteria.

Below Search Operations can be performed on the entire search result.

For more information about search operations, refer to **Search Operations on Entire Result** topic in the **Navigation and Searches** documentation.

For more on searching, refer to the **Search** section of the **Getting Started** documentation.

STEP Workflow Tab

STEP Workflow is STEP's native functionality for structuring and to some extent automating processes around objects in STEP. Typical examples are Product onboarding processes and change / governance processes.

The concept of STEP Workflows differs from the general concept of a workflow, in that STEP Workflows are data-centric, meaning that each instance of a given Workflow always will be tied to an object in STEP. As illustrated below, technically, a Workflow Instance is a relation between a STEP object and a Workflow definition that also exists as an object in STEP.

The STEP Workflow tab has these sub tabs: Tasks and Profile.

Tasks

The Tasks sub tab is the primary interface for working with workflows in STEP Workbench.

1. Each workflow has a flipper that can be opened to display details about the workflow.

2. Administrators can configure which states are displayed for each workflow. The number of tasks for the state are displayed.

3. The Refresh button updates the data displayed for number of tasks in the workflow.

4. Clicking the **Show All Items** button displays all tasks in all displayed states, regardless of the assignee. Only users with the STEP Workflow Administrator privilege have access to this button.

5. Clicking the **Show All Items assigned to me or any group I am a member of** button displays tasks directly assigned to the user or any group that the user is a member of.

6. Clicking the **Show All Items assigned to me** button displays only tasks that are directly assigned to the user.

7. Click the ellipsis button (**...**) to allow users to filter the list of displayed tasks based on a Collection. For example, if a user wanted only to observe objects in the workflow where the Color Attribute = Blue, they can first perform an Attribute search on the Search tab, then save the result as a collection, and use that collection to filter the objects to display only those where Color is Blue.

Profile

1. Click a Profile link to view details of the configuration.
2. The **Edit Configuration** button allows you to modify the data being profiled.
3. The **Update on-demand data** button runs the profile and updates the data displayed.
4. The **Copy to Clipboard** button saves the data displayed to your computer's clipboard
5. Once saved to the Clipboard, this data can be pasted into Excel for further analysis.

For information on how to configure workflows, refer to the **Creating a Workflow** topic.

System Setup Tab

Schema objects are maintained from the System Setup tab. Examples of such objects are Attributes, Action Sets, Contexts, LOVs, Object Types, Tags, Units, Users & Groups, Workspaces, Reference Types, and many more. Most actions performed require Super User access. This is where the core components like integration endpoint, STEP Workflow, Web UI, business rules, etc. are created and configured.

Additional information on the System Setup objects and functions can be found throughout the online help. For example, information on workflows is available in the **Workflows** guide, while information on integration endpoints is available within the **Data Exchange** guide. Information for general functions that are not covered in independent guides (e.g., attributes, references, users and groups) can be found in the **System Setup** documentation.

Toolbar

The features accessible on the toolbar, (located beneath the menu bar), are geared towards navigating between objects and viewing object data in different ways.

The various features available on the toolbar are described below.

Stibo Systems Logo

Clicking the Stibo Systems logo toggles between the STEP dashboard and the STEP Workbench. For more information regarding the dashboard, refer to the **Global Dashboard** section of the **Data Profiling** documentation.

Context List

'Context' acts as a filter that allows a user to view object data defined by, for example, country or language.

To select the context, click the dropdown and then choose the desired context. It is useful to check that the context is properly set because viewing data in the wrong context is likely to cause significant confusion. For more information regarding contexts, refer to the **Contexts** topic in the **System Setup** documentation.

Workspace Toggle Button

Located to the right of 'Context', the Workspace button toggles the user's view of a given object:

- In the 'Main' workspace (🖥), object values can be edited.

- In the 'Approved' workspace (🗹), the user cannot edit values, but can examine values that have been approved.

For more information on workspaces, refer to the **Workspaces** topic in the **System Setup** documentation.

Navigation Buttons

← → ↻

To navigate backward or forward to a previously viewed screen or to refresh the current screen's data, click the 'Back', 'Forward', or 'Reload' buttons, respectively. These buttons are located between the 'Workspace Toggle' button and the URL field. When clicked, these buttons behave in a way similar to most web browsers' 'Back', 'Forward', and 'Reload' functions.

URL Address Field

URL sset?editor=AssetReferencedBy&contextid=Main

To maximize navigability of the STEP tool, all objects may be accessed via an in-tool URL. As with the URL field in a standard web browser, a product can be displayed within STEP by pasting its unique URL into the URL field. The STEP URL always begins with 'step://'; where web URLs begin with 'http://' or 'https://.'

Viewing Mode Buttons

📋 💬 🖥 📖 🗔

Viewing mode enables the user to view data in a variety of ways, dependent on the need. Click a 'View' icon to present data in different ways, as described below:

Normal mode

📋

The default view of the STEP Workbench. With this view selected, users can examine a listing of all relevant attribute and metadata associated with that object.

Translation mode

💬

Users can view all object-related data in up to two languages. The data is presented in a comparison display format. Attributes that require translation are automatically highlighted in green. More information of translations is available in the **Translations** documentation.

Workspace mode

Users can refer to object data as it appears in both the 'Main' and 'Approved workspaces. This comparison view can be useful by allowing a user to view which values have changed since the object was last approved. However, if the object is in 'Never been approved' status, only the 'Main' workspace displays when this view is active. For more information on workspaces, refer to the **Workspaces** topic in the **System Setup** documentation.

Context mode

Users can view all of an object's data for two or more available contexts in a comparison display format. The number of contexts viewable at the same time is configurable. For more information regarding contexts refer to the **Contexts** topic in the **System Setup** documentation.

Revision mode

Users can view the current state of an object's data as well as all previous revisions in a comparison display format. By default, current and previous versions are displayed. The number of revisions viewable at the same time is configurable. For more information on revisions, refer to the **Revisions** topic in the **System Setup** documentation.

Goto Field

This field allows searching for specific objects in the hierarchy by typing their ID, name, or key into the 'Goto' field. When the desired item appears in this field, click on it to display the object. For more information regarding the Goto field, refer to the **Goto** topic in the **Getting Started** documentation. For more information on keys, refer to the **Unique Keys** topic in the **System Setup** documentation.

Tree Tab

This section contains information about how to create and remove local overrides and information about table dimension points.

The above hierarchies and their child objects can be navigated, edited, created, and deleted from the Tree.

The following table is an overview of the different elements of the Tree tab.

Object	Description
Products	It is used to store actual product information. Alternative name is 'Blue folder'
Classifications	It is used to store assets (Images and documents), configurations, and link products. Alternative name is 'Yellow folders' or 'Secondary classification.'
Index Words	An Index structure needs to be created in STEP, in the same way as a 'Classification Hierarchy,' and products are linked into this structure.
Entities	It is used to store the party, supplier data, or contact information. Alternative name is 'White folders.'
Publications	It is used to store print (Example: InDesign) documents and print related configuration like templates, versions, commercial data, and dtp documents. Alternative name is 'Green folders.'

Object	Description
Collections	Collections are containers for storing different sets of objects to perform bulk update or export data.
eCatalogs	It is used to create electronic product catalogs. An electronic product catalog is a data file containing product and price information for a specific product selection. Alternative name is STEP sync.
Recycle Bin	Deleted objects (products, assets, classifications, configurations and entities) are moved to recycle bin from the Tree tab.

It is used to create electronic product catalogs. An electronic product catalog is a data file containing product and price information for a specific product selection. Alternative name is STEP sync.

For further information about objects in the Tree and how to work with them, refer to the **Basic STEP Concepts** and **Object Maintenance in the Tree Tab** topics within this guide.

Object Maintenance in the Tree Tab

Regardless of the particular object type or hierarchy that you are working with, the general principles of maintaining objects in the workbench are the same, and are described in the **All Objects** section of this guide. This includes general information on creating, editing, approving, and deleting objects.

> **Note:** The **All Objects** information should be read and understood prior to focusing on any of the object type specific information (links below), as the basic information that is common to all object types is not repeated in the type-specific sections.

Beyond the general object maintenance topics, additional information on working with specific object types in Tree, including details about the various editors and functionalities available on them can be found in the subsequent topics in this guide:

- Assets
- Classifications
- Collections
- Entities
- Products
- Recycle Bin for the Tree Tab
- Publications: Information about maintenance of objects in the green publication hierarchy is not covered in this guide. It is located in the **Publication Hierarchy** section of the **Publisher (Adobe InDesign Integration)** documentation.

> **Note:** All actions are controlled via privileges. Some users may not have access to create or delete objects, or may only have options to edit specific object types, hierarchies, or attribute values. The information in this guide focuses strictly on the means for carrying out the various actions, and assumes that all required privileges are available to do so. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

A variety of components are also available for maintaining objects in Web UI. For more information, refer to the **Web User Interfaces** documentation. Additionally, objects are often created or maintained within workflows, or via imports, integration endpoints, bulk updates, etc. These types of object maintenance are outside the scope of this material, but additional information is available in the relevant guides throughout the STEP Online Help.

All Objects

This section covers the basic functionality of creating, editing, and deleting objects in the Tree, as well as providing an overview of the commonalities between the various object editors. Regardless of the particular object type or hierarchy that you are working with, the general principles of creating and maintaining objects are the same.

It is helpful if the **Basic STEP Concepts** topic in this guide has been read and understood prior to reading this material.

A variety of components are available for creating and maintaining objects in Web UI. For more information, refer to the **Web User Interfaces** documentation. Additionally, objects are often created or maintained within workflows, or via imports, integration endpoints, bulk updates, etc. These types of object maintenance are outside the scope of this material, but additional information is available in the relevant guides throughout **STEP Online Help**.

> **Note:** All actions are controlled via privileges. Some users may not have access to create or delete objects, or may only have options to edit specific object types, hierarchies, or attribute values.

The information below focuses strictly on the means for carrying out the various actions, and assumes that all required privileges are available to do so. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

Refer to the relevant section(s) below for detailed information on working with objects in the workbench:

- Approval of Objects
- Creating Objects in the Tree Tab
- Deleting Objects in the Tree Tab
- Editing Objects in the Tree Tab

Approval of Objects

This section introduces the user to the concept of approvals in STEP, and provides detailed information on how to carry out approvals in the STEP Workbench.

Approval of objects in the Web UI is handled via a Partial Approval action button on a Node Editor screen. Refer to the **Partial Approval in Web UI** topic in the **Web User Interfaces** documentation.

Approval Overview

The data in STEP is logically divided into two workspaces named Main and Approved.

The Main Workspace is the editable 'draft' Workspace where data is initially born and enriched. The Approved workspace holds approved data deemed ready for production.

In a typical setup, data from the Approved workspace is made available to downstream systems. Data cannot be edited directly in the Approved workspace. Instead, data is reflected in the workspace via an operation called approval.

Approvals can be carried out manually by a user, or programmatically by a business rule, import process, or other operation.

The approval operation only applies to objects that are workspace revisable. These are:

- Product objects
- Classification objects
- Asset objects
- Entity objects configured to be workspace revisable

All other objects in STEP (like attributes, references, etc.) will be identical in the Main and Approved Workspaces and changes made to these will be reflected automatically in both workspaces. These objects are known as being 'Globally revisable'.

Detailed information on how to carry out approvals in STEP Workbench can be found in the **Approving an Object** topic in this guide. This guide also contains a detailed description of the approval symbols that are visible in the different object editors in the **Approved Symbols and Messages** topic in this guide.

> **Note:** All actions are controlled via privileges. Some users may not have access to approve objects, or may only have options to approve specific object types, hierarchies, or attribute values. The information in the subsequent topics assumes that all required privileges are available to carry out the described actions. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

In Use and Not In Use Objects

When an object is approved in STEP, it cannot be purged from the Tree Recycle Bin. This restriction prevents approved objects that show on the Approved workspace from being removed erroneously. 'in Use' indicates that an object is in the Approved workspace, while 'Not In Use' means that the object is only in the Main workspace. For more information, refer to the **Recycle Bin for the Tree Tab** topic in this guide or the **Recycle Bin for System Setup** topic in the **System Setup** documentation.

'In Use' objects cannot be individually deleted nor are they included in the Purge action. An Approve Deletion action is required for each 'In Use' item.

When an object that is not approved is deleted, the Tree Recycle Bin shows the 'Not In Use' indicator. This means it will be purged with the 'Empty Recycle Bin' option.

If an object that is approved is deleted, it continues to display in the Approved workspace until an **Approve Deletion** or **Approve Deletion Recursively** action is performed.

An approved object **can** be removed from the Approved workspace by manually performing a Force Purge operation from the BGP screen after a purge operation fails (due to the object being 'in use'), or, from the Maintain menu. Additionally, you can force purge approved objects which have not yet been approved for deletion from the Tree Recycle Bin, by running a scheduled Recycle Bin empty operation that has 'Force Purge' selected within the Schedule Recycle Bin wizard.

The key difference with the System Setup Recycle Bin and the Tree Recycle Bin is that all of the System Setup objects in the Recycle Bin are flagged with 'Not In Use' since nothing in the System Setup is constrained by Approval status.

Note: The workspace button has an orange background ( ) when Approved workspace is displayed and no background color ( ) for the Main workspace. When in the Approved workspace, neither the Tree nor the System Setup recycle bin are displayed.

Approving an Object

This topic describes how to approve an object in the workbench. When an object is approved, it moves to the **Approved** workspace.

Data Ownership

The concept of data ownership is very important in relation to approvals. For an object to be fully approved, all data that the object owns must also be approved. When data changes, the object that owns that data is considered 'modified' and can potentially become 'unapproved.'

The figure below shows data owned by a Product object (the largest box).

- A Product owns its parent link (also true for Classifications, Entities and Assets).
- The Product owns local values, but not inherited Specification Attribute values. Thus, when these are modified at an ancestor level, this will not affect the Product's approval status. Also, the object's local values (that is, assigned at the product level), will be approved.
- The Product owns all local References and Links for which it is the Source. When a Link or Reference is modified, it is the Source that is changed while the Target is unaffected. Attribute values on the Reference / Link are likewise owned by the Source object.

Approving an Object

To approve an object, right-click on the object and select one of the available approval options.

You can also use the options on the Maintain menu.

Note: If 'approval' is a task within a workflow, then objects can alternately be approved from the task view. Refer to **Working with Tasks in Workflows** in the **Workflows** documentation.

Approve Objects is available when the **Main** workspace is selected.

Approving objects is available for:

- Classifications
- Products
- Images & Documents
- Entities (set up to be Workspace revisable)

The status of an object in the various workspaces can be viewed in the Status tab in the Workspaces field of the relevant editor.

Once object editing is complete, and the object is ready for publishing, approving the object copies the current object values into the Approved workspace.

Conditions to approve an object

- Objects must be approved from the **Main** workspace.

- An object cannot be approved if parent objects are not yet approved (approving must be done from the top down in the hierarchy).

- A Reference or Link cannot be approved if the Target does not exist in the Approved Workspace, i.e., if a Product / Classification is referenced with another Product / Asset / Classification, then the referenced Product / Asset / Classification needs to be approved first before the actual Product / Classification is approved.

- If Attributes or References / Links are Mandatory, objects cannot be approved if there are no values / targets.

- Externally Maintained Attributes or References / Links are not under revision control. Values / references will automatically be reflected in the Approved Workspace and modifying the data will not affect object's approval status.

- The user must have sufficient Approve privileges.

- To easily check differences in the Main and Approved Workspaces, select **Partial Approve**, as discussed below.

- When approving, the object's revision number changes automatically.

- An entire hierarchy can be approved using the **Approve Recursively** option. For more information, refer to **Approving Recursively** below.

Partially Approving an Object

It is possible to approve an object that has a Reference / Link to another object that does not exist in the Approved Workspace. In this instance, the object will become 'partially approved,' meaning that the object and all data that can be approved will be approved. However, the Reference / Link will not be approved. If the Target for the Reference / Link is later approved, the Source will need to be approved again for the Reference Link to be updated in the Approved Workspace.

Partial approvals can also be performed deliberately - both manually and programmatically. Specific Attributes, References, Links, and the object Name can be selected for approval. The Attributes, References, Links and Names are sometimes referred to as 'part objects.' These part objects cannot exist in the Approved Workspace without the object to which they belong. Thus, when the first part object is approved, the object will need to be present in the Approved Workspace.

Usage

Partial approval of selected elements of the object is particularly helpful in situations where certain elements of the object need to be available for usage (in the Approved Workspace) before the rest of the object or its elements can be approved.

For example, consider that there are two users who perform changes for a product and then approve the product. If the product is completely approved, then it can be difficult to identify which user performed specific changes. In this case, using the Partial Approve will allow the user to approve the changes performed only by them and leave the rest of the changes to be approved by the other user who made those changes.

Approving partially

1. In the Tree, select the object to partially approve.
2. In the Maintain menu, click **Approval > Partial Approve**. Optionally, right-click the selected object and click **Partial Approve**.

3. This will bring up the Partial Approve dialog box:

4. The user has to select the required element / elements (for example, attributes) and click on 'Approve Selected' button.

> **Note:** The attribute groups displayed to a user in the Partial Approve dialog are controlled by privilege rules. For more information, refer to the **Privilege Rules** topic in the **Users and Groups** section of the **System Setup** documentation.When an attribute is linked to multiple attribute groups that a user has privileges to, the attribute will display to the user in all of these attribute groups.

Partial Approve Compare View Dialog

The dialog shows which elements of the selected object have been changed since the last approval of the object.

Besides Name, Parent Object, and Default DTP Template, the type of elements listed are attributes, references, and tables. For each element the values in **Main** and **Approved** Workspaces are listed.

For detailed information about the value for an element, click the **Details…**link. This displays a detailed view of the element showing the values for the **Main** and **Approved** workspace:

In the above example, the value for the attribute has changed. Values only present in Main workspace are marked with a green background color. Values only present in Approve workspace are marked with a red background color.

> **Note:** The detailed view differs slightly depending on the element type selected.

All elements are selected as default. To deselect all elements, click the checkbox next to the All Elements node.

You can select the element(s) to approve by clicking the check boxes next to each element. You can also select a whole element group, i.e., **Attributes** by clicking the checkbox next to the element group.

To expand an element group click the + sign next to the element group. To collapse the element group, click the - sign next to the element group. To expand all elements in the dialog, click the **Expand All** button. To collapse all elements in the dialog, click the **Collapse All** button. To check if the selected elements can be successfully approved, click the **Check** button. An Approve report will subsequently summarize the result of the check.

This functionality is also available in the Web UI. For more information on this feature, refer to the **Partial Approval in Web UI** topic in the **Web User Interfaces** documentation.

Clicking the **Approve Selected** button will approve the selected elements of the object and the **Approve** status of the object will change accordingly. Normal **Privilege** rules apply to **Partial Approve**. For more information, refer to **Action Sets**.

Suppress Re-translation

Normally, an approval of a translated Product in a source language will cause the **Translation** status of the Product to be set to **Re-translation needed**. In the Partial Approval dialog this behavior can be suppressed by clicking the **Suppress Re-translation** checkbox. All existing translation relations with status 'Up to Date' will remain in status 'Up to Date'. This is especially used in cases where only minor changes are approved and no re-translation is needed. For more information, refer to the **Translations** documentation.

> **Note:** To get a list of language variations of the object that potentially will be affected by the approval, place the cursor on the **Suppress Re-translation** label.

Check Approve

If you are unsure whether or not you are allowed to completely approve an Object, you can run a **Check Approve**.

1. In the Tree, click the Object to be approved.

   The Editor shows the Object contents in **Main** and **Approved** Workspaces.

2. In the **Maintain** menu, click **Approval > Check Approve**, or right-click on the object, and then select **Check Approve** option.
   - If you only have changed attribute values for which you have the Approve privileges, a **Complete Approval Possible** dialog box appears.

- If the product cannot be approved due to multiple reasons, such as Mandatory values / References being empty, then the report will provide details about the missing information, as shown below:

Note: If you have changed attribute values for which you do not have the Approve privileges the Approval options are unavailable.

For example, consider a Product that has multiple attributes linked and has mandatory values and references which needs to be approved after the changes have been done. In this case, scrolling down or switching between tabs to check if the values are entered is time consuming; Check Approve will help the user to know if the product can be approved completely with a detailed report.

Approve Recursively

Approving recursively is done from the **Main** menu by clicking **Approve Recursively**. Similarly, the Approve Recursively can be done by right-clicking on the object.

Approving Recursively is available when a **Main** Workspace is selected.

Approving Recursively is available for:

- Classifications
- Products
- Images & Documents
- Entities (setup to be workspace revisable)

The status of an Object in the various Workspaces can be viewed in the **History** tab in the Workspaces field of the relevant Editor.

Approving Objects recursively means searching for unapproved Objects linked to (or below) a selected hierarchy node, and approving these Objects (copying them to the **Approved** Workspace).

This is useful and time saving e.g., when a lot of images have been imported and checked and should all be approved.

To recursively approve in the 'Main' Workspace:

1. In the Tree, select the hierarchy containing the Objects to be approved.
2. In the **Maintain** menu, click **Approval > Approve Recursively**.

    A dialog box appears, listing the Name of the selected hierarchy node, contained Objects and status of analysis.

> **Note:** Approve Recursively automatically performs a search for unapproved Objects. You can click the **Skip Analysis** button if this is not needed.

3. Optionally, type a name for the process.
4. Click **OK** button to start the approve process.

    A dialog box appears displaying information on the process.

5. Click **Go to process** button.

    The Process view opens, showing details of the process and a report of approved Objects.

    The hierarchy will now have Approved status indicating that it is copied in the **Approved** Workspace.

Approval Feedback

When clicking **Approve Object** or **Partial Approve**, you might get different types of warnings, depending on your Approve Privileges.

Approve Object Feedback

If you have modified attribute values for which you have **Approve Privileges** and at the same time have modified attribute values for which you *do not* have **Approve Privileges**, an **Unable to Approve the Entire Object** dialog appears.

If you have modified attributes values and do not have **Approve Privileges**, then the option 'Approve' is disabled in the right-click menu. If you have modified attributes values for which you *do not* have **Approve Privileges**, a **Missing privileges** dialog appears.

For more information about user privileges, refer to the **User Actions and Error Descriptions** topic in the **System Setup** documentation.

Partial Approve Feedback

If you have modified attribute values for which you have **Approve Privileges**, and at the same time you have modified attribute values for which you *do not* have **Approve Privileges**, a **Partial Approve** dialog box appears.

In the example above, the user will be able to approve all attribute values in 'Audio Accessories 1' and 'Audio'. All attributes users do not have permissions for will not be displayed.

Approve Recursively feedback

1. In BG Processes, click **Approve Recursively**, open **Active** or **Ended Processes**, click the relevant process.

2. In the **Background Process** tab, open **Execution Report**.

If there are any errors, the report will provide details about the error. If the process or approval was successful, then the report will show 0 errors and 0 warnings.

The following example shows a missing mandatory attribute value, which caused the object to not approve.

Execution Report

1. Recursive approval started on '235915' in context 'English US'
2. Approved 0 classifications; 1 products; 0 assets; 0 entities.; 1 errors
3. Approve error report for 235915-2
! 4. Unable to approve object due to missing mandatory values on attribute(s): step://attribute?id=Target_Attribute
5. Recursive approval of 1 objects done. 0 warnings and 1 errors.

1-5 of 5   Save…   Truncate

Approve Recursively dialog

Approve Recursively

Finding Unapproved Objects (This might be time consuming)

Object	Classifications	Products	Assets
Audio Accessories 1	1	0	0

> **Empty mandatory links/values in Main workspace**

Start Process with Description

Name: Approve Audio Accessories 1

OK   Skip Analysis   Cancel

There are multiple options which are explained below:

- Finding Unapproved Objects: This will analyze the hierarchy and then provide the count of the number of Products / Classifications / Assets / Entities which are currently in unapproved status.
- Empty Mandatory Links / values in Main Workspace: This provides the details about the number of mandatory links / references that are missing for the Products / Classifications / Assets / Entities.
- Start Process with Description: This option is used to enter the name for the Process before starting the background process. This option is not mandatory but is recommended as entering an identifiable name can be useful for review purposes.
- Skip Analysis: This option can be used in cases where the number of child products is large. The analysis of the number of unapproved or missing mandatory values / References can be time consuming but will provide the detailed report. By clicking this option, the analysis will stop and the user can proceed with the approving recursively.

For example, consider there are hundreds of products in a particular parent hierarchy. Selecting each product, one at a time, and then approving them would be time intensive. In these cases, approving recursively will help a user to approve all the products at one time.

Context Dependent Approvals

When an object is approved, that approval always happens in a specific context and will only be applicable to data visible in that context.

To illustrate this concept, refer to the figure below in which object 'P' has values for two different attributes, **Color** and **Width,** in the Main workspace. While **Width** is not dimension dependent, **Color** is, and has different values in two contexts: 'Blue' in the English context and 'Bleu' in the French context. If the object is approved in the English context, only the data visible in the English context will be reflected in the Approved Workspace. Because of this separated approval, the object must also be approved in the French context to have it become completely approved, indicated by a green checkmark in the approval status field. Until this approval across contexts is done, the object in the English context will have the status 'Approved in Current Context on [date + time]', indicated by a yellow checkmark, and the object in the French context will have the status of 'Last Approved on [date + time]' (red X).

If **Color** is set as a mandatory attribute in the French context but is left empty, then an empty mandatory attribute warning will display when attempting to approve the object in the French context.

All mandatory attributes will be checked upon approval to ensure none are empty in the context in which the object is being approved. For example, in the first of the images shown below, the value added for the

mandatory attribute 'Color' in the English context is 'Red'. The object can be approved in this context without any issue. Note, however, that the approval icon is for the current context only (English), hence the partial approval notation.

When the viewing mode is switched from Normal to Context, the empty mandatory attribute alert is shown in the French context.

When changes are made to both contexts and approved on both contexts, the object is fully approved, garnering a green checkmark in both contexts.

	English US	French FR	
> ID	245934	245934	
> Name	Thermal Valve		
> Object Type	Item	Item	
> Revision	0.24 Last edited by USERE on Tue Nov 20 15:39:31 EST 2018	0.24 Last edited by USERE on Tue Nov 20 15:39:31 EST 2018	
> Path	Primary Product Hierarchy/Products/Hardware/Tools/Thermal Valve	Primary Product Hierarchy/Products/Hardware/Tools/(245934)	
> Approved	✓ Approved on Tue Nov 20 15:39:31 EST 2018	✓ Approved on Tue Nov 20 15:39:31 EST 2018	
> Color	Red	Green	

If a change is made in one context, e.g., changing the Color attribute value in the French context to 'Blue,' but leaving the value for the Color attribute in the English context as 'Red,' then the object will regain full approval once the object is approved in the French context.

Approved Symbols and Messages

An object can contain both workspace revisable data and globally revisable data. The Approved symbols and messages indicate the status of the workspace revisable data on a product, classification, image, or document. The status can be viewed in the Approved field on these objects.

For details on the approval process, refer to the **Approving an Object** topic.

For more information on revisability, refer to the **Revisions** topic in the **System Setup** guide.

Approved Status Symbols

Approved Symbols	Status	Description
✖	Unapproved	An object is unapproved if it has never been approved or if revised data on the product, classification, or images & documents in the current context is not approved. For example: ○ An object has never been approved. ○ Revised data has been changed in current context without being approved. Revised data includes attribute values, references, object names, or tables. Examples of changes to revised data include: ■ A change in object name. ■ A changed value on an internally maintained attribute. ■ If an attribute has been linked to a product. ■ If reference links to objects have been made. **Note:** When linking a product to classification and in case the classification object type owns the product links, then the product does not get the Unapproved symbol. For more information, refer to the **Object Types and Structures** topic in the **System Setup** guide.
✔	Approved	Revised data on product, classification, or images & documents is approved in all contexts.

Approved Symbols	Status	Description
		Note: No data in any context needs to be approved.
✔	Partially approved	Revised data has been approved in current context but a reference, object name, or value needs to be approved for the object to be approved in all contexts.
		If you view another context, then you typically notice that:
		◦ A dimension dependent reference is not approved.
		◦ A dimension dependent value is not approved.
		◦ A dimension dependent object name is not approved.
		When all the dimension dependent references, attribute values, and object names have been approved, the symbol changes from yellow Partial Approved symbol to a green Approved symbol.

Approved Status Messages

Messages are displayed for workspace revisable data as follows:

Unapproved

When an object is newly created and never been approved as shown below:

Name	>	>	Value	>
>	ID		235915	
>	Name		235915-2	
>	Object Type		Active Products	
>	Revision		0.1 Last edited by USERE on Thu Oct 12 12:04:10 EDT 2017	
>	Approved		✖ Never Been Approved	

When an object attribute / reference is modified, the status will show as 'Last Approved on' along with the date and time as shown below:

Name			Value	
>	ID		235915	
>	Name		235915-2	
>	Object Type		Active Products	
>	Revision		0.3 Last edited by USERE on Thu Oct 12 12:09:07 EDT 2017	
>	Approved		✖ Last Approved on Thu Oct 12 12:09:03 EDT 2017	

Note: The 'Last Approved' message also displays if using the 'Partial Approve' option on an object. If 'Approved in Current Context' is displayed, then an object is also partially approved but a different message displays (as described at the end of this topic).

Approved

When an object is approved in all contexts the status displays as shown below:

Name			Value	
>	ID		235915	
>	Name		235915-2	
>	Object Type		Item	
>	Revision		0.31 Last edited by USER4 on Mon Jan 07 17:56:10 EST 2019	
>	Approved		✔ Approved on Mon Jan 07 17:56:10 EST 2019	

Partially approved

When an object is approved in only some contexts the status displays as shown below:

Name			Value	
>	ID		235915	
>	Name		235915-2	
>	Object Type		Active Products	
>	Revision		0.5 Last edited by USERE on Thu Oct 12 12:13:20 EDT 2017	
>	Approved		✔ Approved in Current Context on Thu Oct 12 12:15:13 EDT 2017	

Creating Objects in the Tree Tab

Regardless of the particular object type or hierarchy that you are working with, the general principles of creating objects in the workbench are the same, and are described below. Tree icons are set during object type creation according to preference and may be different in your system.

> **Note:** All actions are controlled via privileges. Some users may not have access to create or delete objects, or may only have options to edit specific object types, hierarchies, or attribute values. The information below focuses strictly on the means for carrying out the various actions, and assumes that all required privileges are available to do so. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

Objects can be manually created in the Tree via right-clicking or using the Maintain menu.

Create a new object via right-click

1. Select a parent under which the new object should be created. Note that if the new object should be created as a root node on the Tree tab, the Maintain menu must be used (refer below).

2. Right-click on the parent and select the appropriate 'New...' option. The options will vary based on the selected parent. For example, note the differences between the available options on a classification and an entity, as shown below.

3. Selecting the right-click option will open a Create dialog, appropriate for the selected object super type (e.g., Create Assets for assets and Create Entity for entities). The options available in the dialog are based on the data model defined in System Setup. For example, the Object Type selection will vary based on the allowable object types under the selected parent, and ID will only be available for population if the object type being created does not have autogenerated IDs applied.

> **Note:** The following restrictions apply to the ID for all objects:
>
> * Maximum 40 characters.
>
> * Only the standard ASCII printable characters in the range of 32-126 are allowed.

4. When an object type has been selected and an ID applied, the Create button will be enabled. Clicking Create completes the creation of the new object, which is then accessible in the Tree. If a Name is not supplied, the object will display in the Tree by the ID in parentheses. If a Name is supplied upon creation, the object will display in the Tree using the Name entry. For example, two new objects have been added under Customer C in the screenshot below. The first did not have a Name supplied, while the second did.

Create a new object via the Maintain menu

From the menu in the upper left corner of the workbench, select Maintain > Insert and choose the appropriate option. Note that it is required to use this method when adding a new root node to Tree. Additionally, note that the available options differ based on the active selection when the menu is accessed. For example, the below shows the available insert options when a classification has been selected, whereas the publication-related options would be enabled if a publication object had been selected instead.

| File | Edit | View | Navigate | Format | Maintain | Window | Help |

Context English US

Tree

Tabs (left side): Tree, Search, BG Processes, System Setup, Bookmarks, STEP Workflow

Tree:
- Assets
- Configurations
- ETIM Hierarchy
- Index Words
- Merchandising Hierarchy
- Suppliers
- Web Sites
- Entity Root
- GDSN
- Publications
- Primary Product Hierarchy
- Collections
- eCatalogs
- Recycle Bin

Maintain menu:
- Insert
- Link
- Merge
- Delete
- Force Delete & Purge
- Unlink Object Type
- Duplicate — Ctrl+J
- Duplicate Recursively
- Make Revision
- Approval
- Enable group for workflows
- Revive
- Revive Recursively
- Truncate log...

Insert submenu:

Item	Shortcut
Product	Ctrl+Shift+P
Classification	Ctrl+Shift+C
Classification Root	Ctrl+Shift+R
New Entity Node	
Entity Root	
New Publication...	
New Publication Group	
New Publication Section...	
New Page Template ...	
Orphan Attribute	Ctrl+Shift+O
Asset	Ctrl+Shift+A
Attribute	Ctrl+Shift+T
Attribute Group	Ctrl+Shift+I
List of Values	Ctrl+Shift+L
Dimension	Ctrl+Shift+D
Dimension Point	Ctrl+Shift+M
Workspace	Ctrl+Shift+W
Action Set	Ctrl+Shift+S
New Image Conversion Configuration...	
Create Transformation Lookup Table	
New Event Queue	
New AssetPush Event Queue	
New AssetPush Configuration	
STEP Workflow	Ctrl+Shift+R
Background Process to Monitor Deadlines	Ctrl+Shift+D
User	
Group	Ctrl+Shift+G
New Supplier	
Create Package	
Create STEP Workflow	Ctrl+Shift+R
New Business Condition	
New Business Action	
New Business Library	
Setup Group Root...	

Many of the available options will only be enabled when an appropriate selection has been made on the System Setup tab. For example, an attribute group must be selected for the Attribute or Attribute Group options to be enabled.

Deleting Objects in the Tree Tab

Regardless of the object type or hierarchy that you are working with, the general principles of deleting objects in the workbench are the same and are described below.

Prerequisites

All actions are controlled via privileges. Some users may not have access to create or delete objects or may only have access to edit specific object types, hierarchies, or attribute values. The information below focuses strictly on carrying out the various actions and assumes that all required privileges are granted. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

Delete Objects

Objects deleted in the Tree tab are moved to the Recycle Bin for the Tree, where they can be revived or purged. To fully delete an object, the deletion must be approved, and the object must be purged from the Recycle Bin. For information on the Tree Recycle Bin, refer to the **Recycle Bin for the Tree Tab** topic.

> **Important:** As an alternative, an object can be deleted from the Tree and also purged in a single step using the 'Force Delete & Purge' option in the Maintain menu. This option bypasses the Recycle Bin. Do not use this option if deletion events are required for output to downstream systems since a DELETEAPPROVAL event is not generated for 'Force Delete & Purge'. Refer to the **Force Delete and Purge** heading in the **Maintain Menu** topic of the **Getting Started** documentation.

To delete from the Tree:

1. Select an object (or multiselect using Ctrl or Command) in the Tree.

2. Choose a delete method:

   - Right-click the selection and click **Delete**.

- From the Maintain menu click Delete.

3. Review the Delete confirmation dialog, which varies slightly based on the object selected for deletion and the number of objects to be deleted.

- **Analyzing nodes to be deleted progress bar** - displays as needed when large numbers of objects are being deleted. The Delete button is disabled while the analysis is running. Although the table is empty during the analysis phase, the impacted object types are displayed in the header.

- **The view options buttons** - allow display of the primary image when available.

- **The object to delete table** - includes the names of objects to be deleted and the number of impacted objects.

- **Sub Products** - when deleting a classification, select **Unlink** to leave the sub product in the hierarchy, or select **Delete** to delete the selected objects and the sub products linked to the classification.

  This is not an option for products; all child objects for products are automatically deleted.

Deleting a large number of objects, such as a parent object with more than 1,000 objects, uses a background process (BGP) to move the objects to the recycle bin. This allows the user to continue other activities in the workbench while the BGP runs.

The number of objects that triggers a BGP is determined by the case-sensitive property `Delete.InBackgroundProcess.RequiredNodeNumber=1000`. The default is 1,000. For on-prem systems, the property is included in the sharedconfig.properties file on the application server.

4. Click **Delete** or **Delete in background** to proceed with the deletion or click **Cancel** to close the dialog without making any changes.

5. Review the 'Delete report' dialog or details of the BGP execution report, including the Delete Objections and Warnings if displayed.

   To delete an object, a number of conditions must be met. For example, the object must not be referenced by any other object and must not be active in any workflow. When the deletion conditions are not met, the confirmation window displays the errors (Delete Objections) that must be corrected prior to deletion.

   Approval may be required for the deletion to take effect. For example, if an object has been referenced by another object and that reference has been approved, removing the reference must also be approved (by approving the change on the referencing object) to resolve the deletion objection.

   - If no errors or warnings are displayed, click **Close**.

   - If errors or warnings are displayed in the 'Delete report' window or the 'Delete large number of objects' BGP, it is recommended to note the issues, click **Close**, and manually resolve them. Review the warning section to decide if the Force Delete option is a good choice.

Delete report

Deleted 0 out of 1 objects. 1 object(s) could not be deleted due to the objections stated below.

Name	>
> 12-GGK799 *ID = 100703*	

Delete Objections

"12-GGK799" could not be deleted due to the reasons listed below:
        step://product?id=18210 has a cross reference to the object being deleted step://product?id=100703. The link is visible in these workspaces Approved, Main.
        step://product?id=18212 has a cross reference to the object being deleted step://product?id=100703. The link is visible in workspace Main.

Warning! If you use force delete, the below actions will be taken.

Cross references to objects being deleted will be removed. These cross references will not be reconstructed, if the objects are revived.

[Force Delete] [Close]

- The **Force Delete** button allows deletion of objects with errors and warnings from the 'Delete report' or the 'Delete large number of objects' BGP if the object is not in use (instantiated in the Tree) and typically involves restrictions (as defined on the dialog) if the deleted object is later revived. In either case, Force Delete uses a background process to perform the deletion and the process can be monitored on the BG Processes tab within the Force Purge or Delete Nodes queues.

  If the object is in use, the 'Force delete report' dialog displays success or the objections that must be resolved manually before deletion can succeed.

6. View the deleted object(s) in the recycle bin. For information on the Tree Recycle Bin, refer to the **Recycle Bin for the Tree Tab** topic.

Editing Objects in the Tree Tab

Objects can be easily edited within the Tree tab, and general principles for editing are the same, regardless of the type of object. The available tabs will vary based on the object type selected, as well as other considerations such as data model and licenses. Some tabs are common across the various object super types, while others appear only on specific object types or subsets of object types. Additionally, some editors appear on more than one super type, but have differing functionality based on the type of object that has been selected.

This topic covers the editing functionality available across the various editors, and provides links to additional information for working with specific object types.

> **Note:** All actions are controlled via privileges. Some users may not have access to create or delete objects, or may only have options to edit specific object types, hierarchies, or attribute values. The information below focuses strictly on the means for carrying out the various actions, and assumes that all required privileges are available to do so. More information on privileges is available in the **Privilege Rules** topic in the **System Setup** documentation.

When an object is selected, the main portion of the screen displays a corresponding editor. The main editor for the object is the first tab, which is Classification in the below example.

Tree									

Classification	Sub Products	References	Referenced By	Images & Documents	Tables	Status	State Log	Tasks

Description

Name	>	>	Value
ID			IconRoot
Name			Icons
Object Type			Icons
Revision			0.1 Last edited by Stibo Systems on Fri Jan 02 00:00:00 EST 1970
Approved			✔ Approved on Fri Jan 02 00:00:00 EST 1970
Translation			Not Translated
Path			Classification 1 root/Assets/Icons
Visibility			
Purpose		abc	Storage for icons

All objects will have an **ID**, **Name**, **Object Type**, **Revision**, and **Path** field. Objects that are subject to approval (known as 'workspace revisable') will also have an **Approved** field.

- **ID** cannot be changed once an object has been created, so the field appears yellow, meaning it is not editable. For details, refer to the **Creating Objects in the Tree Tab** in this documentation.

- **Revision** and **Approved** data is auto-populated by the system, so these fields are also not editable.

- Conversely, object **Name** and **Object Type** can be edited (assuming the user has privileges to do so), so those fields appear white.

> **Note:** Any number of attributes may be added to objects under the Description flipper. However, not all data shown in the Description section is an editable attribute. Fields such as ID, Revision, Approved, Translation, and Path are *aspects* of the object (not attributes), and are not editable. Name and Object Type are also aspects of the object, though these may be edited.

Some object types only support Description attributes, meaning all object data is accessed under the **Description** flipper. For object types that support Specification attributes, data is organized by attribute group, and clicking the magnification icon (indicated by a 1 in the screenshot below) will collapse or expand each group, allowing users to focus on the relevant data. All attributes have a validation base type applied that determines the allowable data that can be entered, and is indicated by the icon to the right of the attribute name below (2). Detailed information on attribute validations is available in the **Validation Rules** topic in the **System Setup** guide.

To edit data, click in any editable field. Text attributes can be edited by typing directly into the field, while LOV attributes will provide a dropdown from which users can select a value, as shown below (3).

Pressing the tab key shifts the focus to the next cell and Shift+Tab shifts the focus to the previous cell. Alt + F2 opens the Rich Text Editor, allowing the user to access styling options. For a complete list of shortcuts, refer to the **STEP Workbench Keyboard Shortcuts** topic within this guide. The data fields available for editing will depend entirely on the data model and will vary for each implementation.

> **Note:** Data edited in the workbench is auto-saved, with the change / save being applied as soon as the user exits any field. Therefore, no explicit save action is ever required by the user.

If an object is being edited that is workspace revisable (e.g., subject to approval), editing the object will change the approval status (if the object had been previously approved). Refer to the **Approval of Objects** topic within this guide for more information on approvals.

Multi-Editors

Objects can be multi-selected for editing using Ctrl + click, or by Shift + Down / Up arrow keys. Additionally, objects of the products and classification super types have a Sub Products tab that can be used for multi-editing. Functionality for editing objects is comparable, regardless of how the multi-editor interface is accessed.

Right-clicking in any row *header* will expose the **Rotate Table** option which can be used to access the preferred orientation of the data (Pressing F11 will also rotate the table if any cell in the table is the active selection.). Editing in this manner allows for easy copy / paste of values between objects using Ctrl + C and Ctrl + V.

Right-clicking in any data *cell* will expose the **Hide Equal** and **Mark Different** options, which are especially useful when working across multiple objects as they will hide all equal values, or highlight all different values, respectively.

Additional options for viewing data are available using the **View** menu located in the upper left corner of the multi-editors.

The default view option is to **Show all** which displays all data on the object, similar to what would be available in a single-object editor. Additional options can be configured using the **New View** option. Clicking this opens a dialog for users to enter a name of the view. Clicking OK in that dialog opens an Edit Filter dialog where the user can select the attributes to be included in the view.

The dialog defaults to having only "legal" attributes shown, meaning those attributes that are valid for the object, as well as standard aspects of the object such as ID and Name. Note that object aspects are italicized, while attributes (which are always specification attributes) are shown in standard text. By default, all available attributes and aspects are shown in both the left and right panels. The dropdown in the upper left corner also has options to expose standard attribute search / browse functionality, though typically the Legal Attributes selection is used as this prevents a user from defining an invalid view. The 'Show only' and 'Do not show' radio buttons are applicable to the right panel, where the data for the view is defined. The **Add** button is used when an attribute or aspect has been selected in the left panel and should be added to the view (the right panel). The **Remove** button is used when an attribute or aspect has been selected in the right panel that should be removed the view. The **Add All** and **Remove All** buttons are used to add or remove all attributes and aspects from the view. Clicking **Save** stores the new view.

Once one or more views have been created, they are available for selection from the **View** menu under **Product views**.

An existing view can be edited using the **Edit view** option, and a view that is no longer needed can be removed with the **Remove view** option.

> **Note:** Views are user-specific and machine-specific, so a view created by one user will always be available for that user when using the machine on which they created the view, but will not be available for any other user or for the same user working from a different machine. Workbench views are stored in an XML file on the user's local machine at C:\Users\[user]\STEPUserViews[UserID].xml. If the file is deleted, the configured views will no longer be available.

Right-Click Editing Options

Additional editing options are available by right-clicking within the various editors. These include standard cut / copy / paste options, as well as more exotic options which are briefly described below.

> **Note:** Not all options are available and/or enabled at all times. Some options are available only for particular attribute validation types, and others are available only on specific editors and/or object types. Menus also change based on whether the right-click takes place on the column or row header, or within the active editable value field, as well as when a single object / column / row has been selected vs. when multiples are selected.

- **Character Tag:** Used as a quick option to add tags to attribute values without having to enter the Rich Text Editor. Character tags that have been defined for the system will be available as sub-options to the Character Tag selection. For more information, refer to the **Tags** topic in the **System Setup**.
- **Edit:** Used to open the Rich Text Editor for attribute values, allowing users to apply styles, formatting, spell check, special characters, etc.
- **Filter:** Used to filter the displayed data under any flipper, by values, and is exposed by clicking the column header. This can be especially useful when working with attribute groups with a large number of attributes in them as it allows users to filter based on empty / populated, greater than / less than, etc.
- **Footnote (Insert / Edit):** Used to add an additional piece of information (e.g., a footnote) to an attribute value. Footnotes are added / edited within the Rich Text Editor so using these options will open that dialog. Note that footnotes are only supported for use in conjunction with STEP tables. Using footnotes within attribute values that will output in something other than a table will not yield the expected results. For more information on footnotes, refer to the **Tags** topic in the **System Setup**.
- **Hide:** Used to hide a particular row or column from view, and a hidden row or column is exposed by clicking on the row indicator or column header.
- **Hyperlink (Insert / Edit, Follow, End):** Used for adding hyperlinks to attribute values. Highlight text within the attribute value and select the insert option to provide a hyperlink to be assigned to the selected text. After inserting, and with the cursor at the end of the hyperlinked text, use the end option. This ends the hyperlink so that subsequent text does not become part of it. Use the edit option to edit a previously inserted hyperlink. Select the follow option while the cursor is within the hyperlinked text to follow the hyperlink. For more information, refer to the **Tags** topic in the **System Setup**.
- **Inline Reference (Insert / Edit, Copy as):** Used to add inline references to attribute values. Inline references are used to re-use values present within another attribute, object Name, or ID. This avoids duplication of data by maintaining the data only once, and re-using it from that source as needed. For example, a description attribute may need to dynamically include the object Name, e.g., '[Name] is a great

product!'. Detailed information on working with inline references is available in the **Inline References in Attribute Values** topic within this guide.

- **Insert Special Character:** Used as a quick option to add special characters to attribute values without having to enter the Rich Text Editor. Opens an editor allowing for selection of the most recently used special characters, with an option to access a full Unicode character menu. For more information, refer to the **Tags** topic in the **System Setup**.

- **Override:** Used to manually populate a local value to override a calculated (derived) value. This option is only enabled on calculated attributes. For more information, refer to the **Calculated Attributes** topic in the **System Setup**.

- **Recalculate:** Used for on-demand display of calculated attribute values in the editor if they have previously been disabled via the 'Disable calculated values' option in the View menu. For more information, refer to the **Calculated Attributes** topic in the **System Setup**.

- **Rotate Table:** Used to rotate the data display. As a right-click option, it is only enabled from row / column headers when multiple objects are selected. For a single object, it can be used to rotate the data under a flipper only via keyboard shortcut (Alt + F11).

- **Show All (Rows / Columns):** Enabled after the Hide action has been taken, and exposes all hidden rows / columns.

- **Sort:** Used to sort data based on attribute value rather than attribute name or display sequence. This option is exposed when a column header is selected, and requires a sort selection (Ascending, Descending, or None).

- **Style:** Used as a quick option to add styling to attribute values (e.g., bold or italics) without having to enter the Rich Text Editor. Styles that have been defined for the system will be available as sub-options to the Style selection. For more information, refer to the **Tags** topic in the **System Setup**.

Additional Information

In addition to the main editors for objects, several other tabs / editors are available for editing objects, such as References, Referenced By, etc. However, the available editors and functions within them vary based on the selected object. Therefore, they are described in the context of the type of object being edited, in the subsequent sections of this guide:

- Assets
- Classifications
- Collections
- Entities
- Products
- Recycle Bin for the Tree Tab

- Publications: The publication hierarchy and its associated objects are detailed in the **Publication Hierarchy** section of the **Publisher (Adobe InDesign Integration)** documentation.

Inline References in Attribute Values

Inline references can be embedded in attribute values for attributes that have **Text**, **Text (exclude tags)**, **Numeric Text**, and **Numeric Text (exclude tags)** validation base types. An inline reference use case follows:

> You are working with product objects whose model number is the same as their STEP ID (for example, '12345'). On these objects there is an attribute called 'Product Description' that needs to dynamically reference the object's model number within the text of the attribute. For a Product Description such as 'Acme lawn mower, model number 12345,' the inline reference to the STEP ID would populate '12345.' Using an inline reference in this instance helps to avoid duplication of effort—since the product's model number already exists in STEP as its ID, there is no need for users to manually enter it a second time into the system.

Also, in many cases inline references are easier to use than calculated attributes and easier on system resources. For example, it may be easier for users to use an inline reference to pull in a STEP ID than to create a calculated attribute using the formula 'StepID()'.

One attribute value can include several inline references. An inline reference can reference either a single attribute or an attribute group.

Inserting an Inline Reference using Workbench

1. Select the relevant node. The corresponding editor appears.
2. Click on the leftmost tab within the editor, which is different depending on the object type (for example, 'Product', 'Classification', 'Images & Documents', 'Publication,' and so forth).
3. Activate the **Value** field of the relevant attribute where you want to create or edit the inline reference. Or, highlight the field, right-click, and select **Edit** to launch the larger value editor.

> **Note:** Pressing **Alt + F2** will also open the value editor.

4. Place the cursor at the position in the **Value** field where you want to insert the inline reference, or place the cursor on an existing inline reference to be edited.
5. Right-click, and then click **Insert Inline Reference** to add a new inline reference or **Edit Inline Reference** to edit an existing inline reference.

6. The **Inline Reference** dialog displays.

7. To return a value or values from another object in STEP, not the name or ID of the current object, click the ellipsis button (**...**) to the right of the **Object** field. Ignore this field if you plan to return value(s) from the current object instead.

   ○ Click the ellipsis button (**...**) to display the 'Select Object' dialog, search for or browse to the object that holds the value(s) that you would like to return, then click **Select** to choose the object.

8. Select **Resolve To Object ID** to return the value of the STEP ID of the chosen or current object.

9. Select **Resolve To Object Name** to return the value of the STEP Name of the chosen or current object.

10. Select **Resolve to Attribute Value and/or Unit** to activate the options in the 'Attribute Selection' portion of the Inline Reference dialog.

11. Click the ellipsis button (**...**) to the right of the **Attribute** field to open the 'Select Attribute or Attribute Group' dialog.

12. Search for or browse to the relevant attribute or attribute group for the inline reference, and then click **Select**.

13. For **Attribute Name(s)**, check the **Include** box if the name of the attribute(s) should be included in the inline reference.

14. In the **Separator** field, type a separator to be used between the name and value of the attribute. The default is the equals sign (**=**). Note that the Separator field is not activated unless the **Include** box has been checked.

   For example, if a single attribute is chosen, and the **Include** box is checked, the results will look as follows:

15. Under **Attribute Value(s)**, select the relevant **Aspect** from the dropdown list. Available options are 'Value (s) and Unit(s),' 'Unit(s),' and 'Value(s).'

16. In the **Attribute Separator** field—which is only valid when an attribute *group* has been chosen for the Attribute selection—type in one or more characters to specify how the attribute values should be separated. The default is the semicolon character without a following space (**;**).

    The following screenshot shows:

    ○ (1) An attribute group called 'Manufacturer Information' selected for **Attribute**

    ○ (2) A **separator** of **=** placed between the attribute name and attribute value

    ○ (3) An **attribute separator** of **;** placed between each attribute within the group

    ○ (4) How the attributes and attribute values resolve in the inline reference.

17. Click **OK** to complete the configuration of the inline reference.

Inline References and Multi-Valued Attributes

The **Attribute Separator** field in the Inline Reference dialog does *not* apply to the values of multi-valued attributes. Instead, the separator for values of multi-valued attributes is handled by the <multisep/> tag (**multisep**). The multisep tag is a **Character Tag** in System Setup and comes standard with STEP systems. STEP stores the values of multi-valued attributes with the multisep tag between them, and this tag typically renders as a forward slash (/).

If a multivalued attribute is used in an inline reference, the rendering setup for the multisep tag will be shown between each of the values. In the below example, the 'Country of Origin' attribute has four values. When rendered in the inline reference, these four values are separated by the forward slash (*/*) character.

For more information on STEP character tags, refer to the **Tags** topic in the **System Setup** documentation.

Copying Attribute Values as Inline References

An alternate—and quicker—method of creating an inline reference is to copy the value of an attribute, then paste it into the value editor of another attribute as an inline reference. This inline reference can then be edited like any other inline reference.

1. Navigate to the attribute value that you would like to use as an inline reference and select the value editor field.
2. Right-click and select **Copy as inline reference**.

3. Navigate to the 'destination' attribute value and select the value editor field.

4. Right-click and select **Paste**.

5. The value appears in the destination field as an inline reference.

Note: The copied 'source' attribute value is connected to the 'source' object, meaning that any time an attribute value is coped as an inline reference and pasted elsewhere, the inline reference will never pick up the attribute value from the current object but only from the 'source' object. Also, STEP IDs and STEP names cannot be copied as inline references.

Inserting an Inline Reference using Web UI

Rich text editing allows users to enter and edit text within a web browser. Inline references can be inserted into an attribute value using a Rich Text Editor (RTE) within a Node Editor.

Adding an inline reference in Web UI is similar to adding one in the workbench. For instructions, refer to the **Rich Text Editor** section of the **Web User Interfaces** documentation.

Assets

This topic covers information specific to the asset super type that is important to know when working with assets. For general object maintenance information (applicable to all object types rather than specific to assets), refer to the **All Objects** topic within this guide.

An asset is any product-related electronic file, such as images (tiff, eps, jpeg, etc.), Word docs, Excel files, PDFs, PowerPoint files, text files, etc. Images are a common asset so they will be the focus of this section. In most cases, the terms "asset" and "image" are interchangeable.

Although any image can be loaded into STEP regardless of its quality or origin, it is important that a quality check be performed by users with graphic arts knowledge. Ideally, this check occurs prior to import into STEP so that only approved images are available in the system.

Classification of Assets

Asset objects live in a classification hierarchy. The classification hierarchy for assets should be separated from other classification hierarchies (e.g., those used for alternate structuring of products, import / export configuration storage, etc).

The recommendation is to have one classification object type and instance for each asset object type. For example:

Within the individual type-based classifications, additional levels can be modeled if necessary. A common option is to work with a 2-level folder structure based on the first characters of the asset file name. For example:

With a structure like this, it is not intended that users should be browsing the hierarchy to locate assets. Instead, assets are typically located via references from other objects and/or via searches. STEP does not require that the image hierarchy have multiple levels. Assets can be stored in a single folder (e.g., a flat structure). However, this is not typically recommended as it can be impractical to navigate the hierarchy as the number of assets increases.

The same asset object can exist below multiple different classifications. However, this functionality is typically only used for cases where suppliers upload assets. These assets will initially go into supplier-specific classifications and can subsequently also be linked into the primary asset hierarchy.

Asset File Type Designation

New asset object types are defined in STEP the same way any other object types are, via the System Setup tab. One key difference between asset object types and other object types, such as products or classifications, is that there are no parent-child relations between assets, as asset instances live in classification hierarchies.

Asset object types are defined in STEP Workbench System Setup under 'Object Types & Structures.' Apart from the built-in generic type 'Assets', it will be a flat list of the different asset object types required for the setup. For example:

On older systems, you may observe asset object types that are file-type specific. For example: JPG Image, Word Document, etc. For newer installations, this file type approach is generally not used, and instead, it is recommended to use object types that convey information about the asset's use (as shown above), rather than the file type. This is done for clarity as it is often more important to understand the purpose of the asset. For example, an asset is not just a PDF file, instead it is an Installation Manual, a Product Brochure or an Owner's Manual. One advantage of the purpose-based setup is that it is possible to restrict reference types to point to the specific types of assets and not just to generic file types.

With the move away from file type specific asset object types, asset object types cannot be applied automatically when digital media files are imported into STEP as there is no 1:1 relationship between file types and asset object types. It is possible to have object types automatically applied upon import when a file-based approach is used, but this functionality generally does not weigh up to the disadvantages of the approach.

Asset Objects and Digital Media Files

A fundamental point when dealing with assets is that there is no 1:1 relationship between asset objects and digital media files in STEP. Thus, it is possible to work with asset objects that do not have "content", i.e., are not tied to any digital media files. Furthermore, the content can be dimension-dependent so that an asset is tied to different files in different contexts. Finally, an asset can have different content in different historical revisions.

As explained in the next section, there are different options for how and where the actual digital media files are stored. Independently of which option is selected, asset objects are stored in STEP and it is to these objects (not to the actual media files) that relations are modeled (using references).

Image Variants and Handling

Different publishing projects impose various requirements on the use of images. For example, a high-resolution image in STEP may be a TIFF. However, for the web, a jpeg is needed. Or, if the high-resolution image is an EPS, a GIF may be needed instead of a jpeg.

To handle these scenarios, STEP can use the original high-resolution image to generate the needed image versions based on a set of templates or image conversion pipelines. When using an image conversion, the images in STEP must be of sufficient quality to allow these variations to be properly created.

More information on image conversions is available in the **Image Conversion Configuration** topic in the **Digital Assets** guide.

More Information

For specific details about working with assets in the workbench, refer to the **Maintaining Assets** and **Linking Assets to Products** topics within this guide.

For information on working with assets in Web UI, refer to the **Asset Handling in Web UI** topic in the **Web User Interfaces** guide.

For information on importing, exporting, and managing assets, refer to the **Digital Assets** guide.

Maintaining Assets

This topic covers information specific to the Asset super type that is important to know when working with assets. For general object maintenance information (applicable to all object types rather than specific to assets), refer to the **All Objects** topic within this guide.

Creating Assets

The basic methods for creating an asset are the same as any other object type, as described in the **Creating Objects in the Tree Tab** topic within this guide. However, there are a few considerations that are specific to assets that users should be aware of when creating assets, which are described.

Assets are essentially placeholders in STEP, to which a digital media file must be associated. When assets are created in STEP via import of a digital media file, this association happens automatically. However, when assets are created using standard object creation methods in Tree (e.g., right-clicking on a classification folder and selecting 'New Asset'), it is only the placeholder that is created. An asset created in this manner will initially have no system properties and no content. For example:

A user can right-click on the asset and select **Replace Asset Content** to open a dialog where a digital media file can be selected from the local machine. STEP will automatically read and populate the properties of the asset, and a thumbnail of the digital media file will display. For example:

Tree		Chihuahua rev.1.0 - Images & Documents	

Images & Documents | References | Referenced By | Status | State Log | Tasks

Description

Name	>	>	Value	>
>	ID		115308	
>	Name		Chihuahua	
>	Object Type		Product Image	
>	Revision		1.0 Last edited by USER6 on Sun Jan 29 10:59:56 EST 2017	
>	Approved		✗ Never Been Approved	
>	Translation		Not Translated	
>	Path		Classification 1 root/Assets/Product Images/1/12/Chihuahua	
>	ProductsGaloreAttribute	abc		

System Properties:

Name	>	>	Value	>
>	Class	abc	True color	
>	Colorspace	abc	RGB	
>	Compression	abc	JPEG	
>	Depth	123	8 (bits/sample)	
>	Extension	abc	jpg	
>	Filename	abc	136.JPG	
>	Format	abc	JPEG (Joint Photographic Experts Group JFIF image)	
>	Height	123	1151.46 (mm)	
>	MIME Type	abc	image/jpeg	
>	Pixel Height	123	3264 (pixels)	
>	Pixel Width	123	2448 (pixels)	
>	Profile	abc	Custom EXIF, Custom XMP	
>	Samples	123	3 (samples/pixel)	
>	Size	abc	2,270,288	
>	Upload Time	abc	2017-01-29 10:59:56	
>	Width	123	863.59 (mm)	
>	Horizontal DPI	123	72 (dpi)	
>	Vertical DPI	123	72 (dpi)	

To avoid this two-step process, assets are often introduced in STEP via import (or specific transfer protocols for an initial implementation). More information on importing assets is available in the Importing Assets section of the Digital Assets guide.

Asset Editor

General information about editing objects in STEP is available in the **Editing Objects in the Tree Tab** topic within this guide and is not repeated in this section. However, assets have some additional editing options specific to working with digital media files, which are described.

Images & Documents

The Images & Documents tab is the primary workbench interface for assets. It has three sections, described below.

1. The **Description** flipper contains the same basic information as other object types. Additional Description attributes can be made valid for assets to support data such as keywords or asset descriptions. Specification attributes cannot be made valid for assets.

2. The **System Properties** flipper displays data that is read automatically from the digital media file. This information cannot be edited.

3. The asset thumbnail has a number of options available for editing assets. Additional right-click options are also available when the asset itself is right-clicked from the Tree. All of the options that are specific to assets only (accessible from right-click on the thumbnail or the asset) are described below.
   - **Create Local Content of Asset:** Creates a local version of the asset specific to the current context. Refer to the Asset Dimension Dependencies section below for more information.

- **Delete Local Content of Asset:** Deletes the content of an asset that is *not* dimension dependent. Deletes the *local* (context-specific) content of the asset if the asset *is* dimension dependent. Refer to the Asset Dimension Dependencies section below for more information.
- **Edit Asset:** Opens the digital media file for editing in an external program, in addition to an Edit Asset dialog in STEP. Upon completion of editing in the external program, click save within the program to store the edited asset to a temporary directory. Then click OK in the Edit Asset dialog in STEP to have STEP retrieve the edited file from the temporary directory and store this in the asset. Note that the media file will open in the application associated with the file type. For example, for files ending with .xls, Excel will automatically be launched. This may be different from computer to computer. One user's computer may open up EPS images in Photoshop, while another user's computer may open the same file types in Illustrator.
- **Export Images & Documents:** Opens the Export Images and Documents wizard to make selections to export the currently selected asset(s). Refer to the Export Images and Documents Wizard topic in the Digital Assets guide for more information.
- **External Viewer:** Opens an external viewer for viewing the asset. This is comparable to the Edit Asset function in that the program that is utilized is specific to the file type and the user's computer settings. It differs in that any changes made to the asset in the external program are not saved back to STEP.
- **Image Viewer:** Opens an image viewer within STEP for the user to examine the actual asset (as opposed to just the thumbnail).
- **Push Asset(s):** Initiates asset push for the selected asset(s). Refer to the Asset Push section of the Digital Assets guide for more information.
- **Replace Asset Content:** Opens a dialog for the user to select a digital media file for the asset. Refer to the 'Creating Assets' section above for more information.
- **Save to disk:** Opens a standard save dialog allowing the user to select a location on their local machine to save the digital media file to.
- **Unlink asset:** Only enabled if the asset has been linked directly into a publication, in which case it unlinks the asset from the publication. Refer to the Publication Hierarchy section of the Publisher (Adobe InDesign Integration) documentation for more information.

References

The References tab displays the classifications that the selected asset is linked to, and allows for linking to additional classifications using the **Link to Classification** link. Each asset must be linked to at least one classification, but may be linked to many. Links can be removed by right-clicking on the row indicator and selecting 'Remove Link to Classification'. The Name of each classification displayed is hyperlinked for easy navigation, and revision, approval, and translation statuses are also displayed.

Note: While the maximum number of references to one object node is limited to 10,000 instances, this value can be changed; however, it is against Stibo Systems recommended practices to use this many references. Before changing this value, contact Stibo Systems for assistance.

Referenced By

The Referenced By tab is where all references of which the selected object is the target (e.g., all the objects that the selected object is referenced by) can be viewed and edited (assuming proper privileges are in place). The display of the Referenced By tab on an asset will vary slightly from system to system, based on the data model.

1. **Reference Flippers:** References can be placed in attribute groups for display purposes. All references for which the selected object is a valid target that have been placed in attribute groups will display first on the screen, with the flipper title being equal to the name of the attribute group. References can be added by clicking the (**+**) on the reference. This will open a dialog allowing the user to select a source for the reference, and a reference will be created from the object selected in the dialog to the currently selected object that you are standing on (e.g., current object = target, dialog selection = source). If any attributes are available on the reference and editable, they can be edited within this interface. References can be removed by clicking the (**X**) on any existing reference. Additional information on configuring and working with references is available in the Reference and Link Types topic in the System Setup.

2. **Ungrouped Referenced by Products, Classifications or Entities:** The functionality is identical to what is described for the Reference Flippers section above. The only difference is that this area displays references that have *not* been placed in attribute groups for display purposes.

3. **Used on Page:** Displays publications that the selected object is used in. Additional information about working with publications is available in the Publisher (Adobe InDesign Integration) section of the online help.

Status

The Status tab provides general information about objects, including revisions, translation status, and approval status. For more information on these basic settings, refer to the Status Tab topic in the Products section of this guide. For assets specifically, this tab also includes an Asset Push Status section that describes the status of assets for the various asset push configurations on the system. For more information, refer to the Monitoring Asset Push topic in the Digital Assets guide.

State Log

The State Log tab allows users to view the recent history of the object across all workflows in which it has been entered. Refer to the State Log Tab topic in the Workflows documentation for more information.

Tasks

The Tasks tab displays all active tasks across all workflows for the selected object, subject to the user's privileges (only tasks that the user has the rights to address are visible). When relevant tasks and privileges are in place, the user is able to act on the tasks from this editor, including to edit data and move tasks through the workflow. More information on the Tasks tab is available in the 'Moving Tasks through a Workflow in Workbench' topic in the Workflows guide.

Asset Dimension Dependencies

Individual asset object types can be made dimension dependent using the Dimension Dependencies parameter on the object type. This configuration will only affect the STEP Name of assets, meaning that it allows for individual assets to have a different name based on the indicated dimension dependencies (e.g., 'Red Hat' in English and 'Chapeau Rouge' in French when the dependency is Language).

It is also possible to make the content of assets dimension dependent so that an asset in STEP can be tied to different digital media files in different Contexts. This is configured using the Image & Document Settings > Dimension Dependencies parameter in System Settings.

This setting is global, meaning it applies to all assets. Unless there is a very special reason for turning on asset dimension dependencies, this should be avoided. As mentioned, the setting is global, meaning that special procedures must be implemented for creating assets that are to have the same content in all contexts. Thus, if you import a digital media file (and via this create an asset instance) in a context that does not use the top-level dimension point for the dimension on which asset content depends, the content will be created only in the dimension point the current context uses.

For additional information, refer to the **Image & Document Settings** topic in the **System Settings** documentation.

Custom Asset Metadata

When importing assets into STEP, System Properties attributes can be automatically created in STEP on the asset, and then populated with the image metadata detected on the incoming assets. The image metadata must be formatted as either XMP (Extensible Metadata Platform) or EXIF (Exchange Image File). Determination of which metadata attributes should be housed in STEP is configured manually.

In an image file, image metadata is stored as plain text in XML format. Based on the configuration file and import shown below, the Creator, Subject, and Description metadata will be written to STEP. In the following sample, some rows have been removed for brevity, as indicated by '...'.

```xml
1  <x:xmpmeta xmlns:x="adobe:ns:meta/" x:xmptk="Adobe XMP Core 5.3-c007 1.136881, 2010/06/10-18:11:35 ">
2    <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
3      <rdf:Description
4        rdf:about=""
5        xmlns:xmpMM="http://ns.adobe.com/xap/1.0/mm/"
6        ...
7      <dc:creator>
8        <rdf:Seq>
9          <rdf:li>OKL Photo:RM Style:RM</rdf:li>
10       </rdf:Seq>
11     </dc:creator>
12     <dc:subject>
13       <rdf:Bag>
14         <rdf:li>lucite</rdf:li>
15         <rdf:li>box</rdf:li>
16         <rdf:li>chest</rdf:li>
17         <rdf:li>trunk</rdf:li>
18       </rdf:Bag>
19     </dc:subject>
20     <dc:description>
21       <rdf:Alt>
22         <rdf:li xml:lang="x-default">Lucite trunk</rdf:li>
23       </rdf:Alt>
24     </dc:description>
25     ...
26     </rdf:Description>
27   </rdf:RDF>
28 </x:xmpmeta>
```

Prerequisites

The user should have a basic understanding of XML, the XML structure of image metadata, and XPath before proceeding with configuration. The configuration file uses XML to define attribute names and the XPath query to retrieve metadata. For more information, search the web.

XMP Configuration File

The custom asset metadata configuration file uses the instruction 'XmpConfiguration' to define the name of the system attributes being created in STEP and the XPath that defines how to retrieve the image metadata.

XPath is an XML query language STEP uses to search the XML within an image file and identify the desired metadata. The XMP configuration file defines the XPath queries to be run against an image file being imported.

The following sample configuration file defines three metadata attributes (Creator, Description, and Subject), and the XPath query required to find the corresponding metadata.

```
 1  <XmpConfiguration>
 2    <XmpProperties allow="true">
 3
 4      <XmpProperty
 5        name="Creator" unit=""
 6        xpath="/*[name(.)='x:xmpmeta']/*[name(.)='rdf:RDF']/*[name(.)='rdf:Description']/*[name(.)='dc:creator']/*[name(.)='rdf:Seq']/*[name(.)='rdf:li']"/>
 7
 8      <XmpProperty
 9        name="Description" unit=""
10        xpath="/*[name(.)='x:xmpmeta']/*[name(.)='rdf:RDF']/*[name(.)='rdf:Description']/*[name(.)='dc:description']/*[name(.)='rdf:Alt']/*[name(.)='rdf:li']"/>
11
12      <XmpProperty
13        name="Subject" unit=""
14        xpath="/*[name(.)='x:xmpmeta']/*[name(.)='rdf:RDF']/*[name(.)='rdf:Description']/*[name(.)='dc:subject']/*[name(.)='rdf:Bag']/*[name(.)='rdf:li']"/>
15
16    </XmpProperties>
17  </XmpConfiguration>
```

In the above example, the 'creator' attribute is defined by the text:

```
name="Creator" unit=""
```

The XPath to find the creator metadata is defined by the text:

```
xpath="/*[name(.)='x:xmpmeta']/*[name(.)='rdf:RDF']/*[name(.)='rdf:Description']/*
[name(.)='dc:creator']/*[name(.)='rdf:Seq']/*[name(.)='rdf:li']"/>
```

Another example (an XML block in an image file and the XPath):

```
1    <x:xmpmeta xmlns:x="adobe:ns:meta/" x:xmptk="XMP Core 4.4.0-Exiv2">
2     <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
3      <rdf:Description rdf:about=""
4        xmlns:iptcExt="http://iptc.org/std/Iptc4xmpExt/2008-02-29/"
5        xmlns:xmpMM="http://ns.adobe.com/xap/1.0/mm/"
6        xmlns:stEvt="http://ns.adobe.com/xap/1.0/sType/ResourceEvent#"
7        xmlns:plus="http://ns.useplus.org/ldf/xmp/1.0/"
8        xmlns:GIMP="http://www.gimp.org/xmp/"
9        xmlns:dc="http://purl.org/dc/elements/1.1/"
```

```
10        xmlns:tiff="http://ns.adobe.com/tiff/1.0/"

11        xmlns:
      xmp
      ="http://ns.adobe.com/xap/1.0/"
                              iptcExt:
      DigitalSourceType="http://cv.iptc.org/newscodes/digitalsourcetype/digitalCapture"

12        xmpMM:DocumentID="gimp:docid:gimp:7620dabd-f6a6-435f-a865-ff3b8315b650"

13        xmpMM:InstanceID="xmp.iid:9c338c25-620b-4d53-adc7-c2a921b771cd"

14        xmpMM:OriginalDocumentID="xmp.did:e19d764e-1731-46ca-9fe1-8c86d0b29d05"

15        plus:ModelReleaseStatus="http://ns.useplus.org/ldf/vocab/MR-LPR"

16        GIMP:API="2.0"

17        GIMP:Platform="Windows"

18        GIMP:TimeStamp="1613727775463349"

19        GIMP:Version="2.10.22"

20        dc:Format="image/png"

21        tiff:Orientation="1"

22        xmp:CreatorTool="GIMP 2.10">

23    <XmpProperty name="GIMP_Version" unit="" xpath="/*[name(.)='x:xmpmeta']/*[name
      (.)='rdf:RDF']/*[name(.)='rdf:Description']/*[name(.)='GIMP:API'] | /*[name
      (.)='x:xmpmeta']/*[name(.)='rdf:RDF']/*[name(.)='rdf:Description']/@*[name(.)='GIMP:API']"
      />
```

Using an XMP Configuration File

1. Create and save a custom asset metadata configuration file using XmpConfiguration instruction as shown above, that defines:
   - the image metadata attribute name(s)
   - the appropriate XPath to the required metadata on the image

2. Save the configuration file to the STEP server in the same directory as the sharedconfig.properties file.
3. Edit the sharedconfig.properties file and include the case-sensitive **XMP.ConfigFile** property as follows, where 'customxmpconfiguration.xml' is the name of the configuration file created above.

```
XMP.ConfigFile = /workarea/customxmpconfiguration.xml
```

4. Save the sharedconfig.properties file.
5. Restart the STEP server to apply changes to both configuration files.
6. Import an image that includes the metadata attributes defined in the XMP configuration file.
7. Navigate to the imported asset to view the metadata assets on the System Properties flipper.

    Custom attributes are identified in the STEP asset editor by the text 'asset.' which is prepended to the attribute name (for example, 'asset.Creator').

Important: Custom coding by Stibo Systems can be used to allow attributes to be displayed in workbench with names other than 'asset.[attribute name]'. For more information, contact Stibo Systems.

Linking Assets to Products

If the asset's name can be matched to the product, then this function can be performed when the asset is imported. If not linked at this time, there are two ways that the interface allows the link to be made: a) from the product or b) from the asset.

There are three ways to link images to products:

- From the product
- From the asset
- From import

> **Note:** While the maximum number of references to one object node is limited to 10,000 instances, this value can be changed; however, it is against Stibo Systems recommended practices to use this many references. Before changing this value, contact Stibo Systems for assistance.

Linking Assets to Products (From Products)

1. Select the product and then select the **References** tab.

Product	Sub Products	**References**	Referenced By	Images & Documents	Commercial	Tables	Category Profile	Proof View	Status	State Log	Tasks

2. Navigate to the Image References section of the **References** tab. Click on the + symbol to link the image to the correct area. For this example 'Primary Product' will be used as it is the most common reference type made.

Image References				
Reference Type	∨	> Target	>	Thumbnail
> Brand Name Logo	+			
> Illustration	+			
> Primary Product ...	+			
> Product Image	+			
> Video	+			

3. A search window displays.

4. Search for and select the appropriate image. By selecting 'Primary Image,' it denotes that the image is the exact representation of the product. Once a Primary Image has been linked to a product, a thumbnail of the image will appear when the product is selected.

Note: When assets are linked to products, you must designate what type of reference is being made. For example, is it an image that represents the product? Is it an accessory to the product? Or a related document? This reference type denotes that the image being linked to the product is a direct representation of that product. When you make such a reference, a thumbnail of the image is attached to the product. The thumbnail will only appear for this reference type. It is possible to link more than one image to the reference type if the reference type is set to allow multiple references 'yes.'

Linking Assets to Products (From Assets)

1. Select the image in the Assets folder in the **Tree**. Then, select the **References by** tab.

2. If it is not already open, click on the 'Image References' flipper to open it. Click on the + sign for 'Primary Product Image' to link the image to the product.

Images & Documents	References	**Referenced By**	Status	State Log	Tasks

Image References

Reference Type	˅	>	Source	>	Thumbnail
>	Primary Product ...	**+**	🖼		
>	Product Image	**+**	🖼		

Ungrouped Referenced by Products, Classifications or Entities

Reference Type	˅	>	Source	>		>

Used on Page

Publication	>	Version	>	Page	>	Area Used

3. Navigate to the Product in the pop up window, and select it.

4. Selected image will be linked to the product. Once a Primary Image has been linked to a product, a thumbnail of the image will appear when the product is selected as illustrated in the below image.

Linking Assets to Products using the Import Manager

This method is best used for large amounts of products / assets linking. Ideally, you should already have a file in Excel that has the products and desired Image ID set up according to how you want them to be after import.

> **Note:** If you only need to link a few assets to products, then it is more efficient to link them via the interface.

1. Go to **File** and select **Import**, then **Data**. An 'Import Manager' window will appear. On 'Select Data Sources', click the ellipsis button (**...**) next to 'Filename' and select your file.

2. Proceed to the 'Map Data' step. Select a source column and click the **Map** button. Map the column holding IDs to 'ID', map the column holding the asset to be referenced to 'Asset Reference'. After selecting the 'Asset Reference' radio button, select the 'Primary Image' radio button. For more information on mapping, refer to **Inbound Map Data - Map** in the **Data Exchange** documentation.

Map <Name> to

- ◯ ID
- ◯ Name
- ◯ Attribute
- ◯ Product Classification Link
- ◯ Product Reference
- ● Asset Reference
- ◯ Classification Reference
- ◯ Entity Reference
- ◯ Reference Meta-Data
- ◯ Parent
- ◯ Object Type
- ◯ Variable
- ◯ Multivalued Variable
- ◯ Overrides product
- ◯ Add child to override
- ◯ Data Container

Target ID Aspect   ID

- ◯ Brand Name Logo
- ◯ Illustration
- ◯ Installation Manual
- ◯ MSDS
- ◯ Owners Manual
- ● Primary Product Image
- ◯ Product Image
- ◯ Video

☐ Mandatory

Cancel   OK

3. Click OK to close the Map To dialog.
4. If the image IDs were not found or the import file data was not done correctly, then columns will appear in red. For information on input files, refer to **Asset Reference - Map Inbound** in the **Data Exchange** documentation.

Note: If the image IDs were not found or the import was not done correctly, then columns will appear in red.

STEPXML Import

It is also possible to link the images to product via STEPXML import. The following code snippet, shows an example XML file shown below:

```xml
<?xml version="1.0" encoding="utf-8"?>
<STEP-ProductInformation ContextID="Context7" WorkspaceID="Main"
UseContextLocale="false">
  <Products>
    <Product ID="18210" UserTypeID="Item" ParentID="18209">
    <Name>18210 M B</Name>
    <AssetCrossReference AssetID="20584" Type="PrimaryProductImage"/>
   </Product>
  </Products>
</STEP-ProductInformation>
```

Classifications

This topic covers information specific to the Classification super type that is important to know when working with classifications. For general object maintenance information (applicable to all object types rather than specific to classifications), refer to the **All Objects** topic within this guide.

Classifications are used to build hierarchies and objects that bundle other objects into organized groupings. For example, images, manuals, and icons could be uploaded to STEP as assets and stored in appropriate subfolders under the 'Assets' classification folder. Product objects could also be linked into classifications to provide alternative categorizations of objects that vary from the product hierarchy structure.

Classification Editor

The primary editor for classification objects is the Classification tab.

This tab will display all description attributes that are valid for the classification. Note that only description attributes are available on classifications (as opposed to products, which can also have specification attributes). More information on description attributes is available in the **Description Attributes** topic of the **System Setup** documentation.

Sub Products

When on a classification, the Sub Products tab is used to display objects of the product super type that are linked into the classification via Product to Classification links. When the selected classification does not have product children (e.g., classifications used to house assets or configurations), the Sub Products tab does not provide any meaningful information.

Data can be edited on the products linked into a classification from the Sub Products tab by clicking directly into any editable field. Standard editing capabilities are available within this interface (as described in the **Editing Objects in the Tree Tab** topic within this guide), including copy / paste functionality using Crtl + C and Crtl + V. Right-clicking on any field within the table will expose additional options, including Copy, Paste, Hide Equal, and Mark Different selections - all of which are self-explanatory and can be especially useful when editing multiple objects.

Two views are available using the **Rotate Table** option. As shown above, the view can be organized to have attributes on the vertical axis. As shown below, the table can also display products on the vertical axis. Right-clicking within the header field exposes different options than within the data fields, including options to add and remove products.

Selecting **Remove Product** deletes the product to classification link between the objects, but does not delete the product itself.

Selecting **Add Product** opens a dialog allowing the user to browse hierarchies to select a product to link, as well as specifying the link type to be applied.

Note that the same functionality is available using the **Add Product** link at the bottom of the Sub Products editor.

References

The References tab is where all references of which the selected object is the source can be viewed and edited (assuming proper privileges are in place). In addition, if the object has privileges applied, has objects visible in other contexts, or has any linked attributes, that information can be viewed (and in some cases edited) on this tab.

The display of the References tab on a classification will vary slightly from system to system, based on the data model. If the selected object has classification reference types for which the object is a valid source, those will appear on this tab, in addition to the default flipper options.

1. **Reference Flippers:** References can be placed in attribute groups for display purposes. All references for which the selected object is a valid source that have been placed in attribute groups will display first on the screen, with the flipper title being equal to the name of the attribute group. References can be added by clicking the (**+**) on the reference. This will open a dialog allowing the user to select a target for the reference, and a reference will be created to the object selected in the dialog from the currently selected object that you are standing on (e.g., current object = source, dialog selection = target). If any attributes are available on the reference and editable, they can be edited within this interface. References can be removed by clicking the (**X**) on any existing reference. Additional information on configuring and working with references is available in the **Reference and Link Types** topic in the **System Setup** documentation.

2. **Ungrouped Classification References:** The functionality is identical to what is described for the Reference Flippers section above. The only difference is that this area displays references that have *not* been placed in attribute groups for display purposes. If *all* references that are valid for the selected object have been placed in attribute groups, the **Ungrouped Classification References** flipper will not be present.

3. The **Applied Privileges** flipper allows users to apply privileges to the selected classification. Detailed information on creating and editing privileges is available in the **Privilege Rules** section of the **System Setup** documentation.

4. The **Visible Objects in Other Contexts** flipper displays subproducts that are visible in another context, which is only applicable if classification hierarchies have been set to be dimension-dependent in System Settings. Refer to the **Classification Hierarchy Settings** topic in the **System Setup** documentation for detailed information.

5. The **Attributes** flipper allows the user to view attributes linked to the classification, as well as to add new links using the **Link to Attribute** link. When attributes are linked to a classification, they are available to be

populated on any objects of the product super type that reference the classification (assuming the attributes are also made valid on the applicable product object type). The exact columns available will depend on the data model and the attributes that have been made valid on the attribute links. Whether or not the various attributes are editable will also depend on the setup of the data model. However, an ID and Name field are always shown, with the attribute name being a hyperlink that can be used to navigate directly to the attribute. An Attribute Groups column is also present, displaying the attribute group(s) that the attribute is in. A Mandatory column is present and if checked, product objects that reference the classification cannot be approved until a value has been provided for the attribute. Note that mandatory settings on the attribute itself apply globally, while mandatory settings on the attribute link apply only to product objects that reference the classification at which the attribute is linked (or reference a classification that is inheriting the link). More information on mandatory settings is available in the **Mandatory Attributes** topic in the System Setup. If the attribute link is inherited, the row cannot be edited and the 'Inherited from' column will display the parental node where the attribute has been linked, which is hyperlinked for easy navigation. More information on linked attributes is available in the Inheritance in the **Product Hierarchy** topic within this guide and in the **Attribute Links** topic in the **System Setup** documentation.

Referenced By

The Referenced By tab is where all references of which the selected object is the target (e.g., all the objects that the selected object is referenced by) can be viewed and edited (assuming proper privileges are in place). In addition, if the object is used by a match code or is used by any publication, that information can be viewed on this tab.

The display of the Referenced By tab on a product will vary slightly from system to system, based on the data model.

1. **Reference Flippers:** References can be placed in attribute groups for display purposes. All references for which the selected object is a valid source that have been placed in attribute groups will display first on the screen, with the flipper title being equal to the name of the attribute group. References can be added by clicking the (**+**) on the reference. This will open a dialog allowing the user to select a target for the reference,

and a reference will be created from the object selected in the dialog to the currently selected object that you are standing on (e.g., current object = target, dialog selection = source). If any attributes are available on the reference and editable, they can be edited within this interface. References can be removed by clicking the (**X**) on any existing reference. Additional information on configuring and working with references is available in the **Reference and Link Types** topic in the **System Setup** documentation.

2. **Ungrouped Referenced by Products, Classifications or Entities:** The functionality is identical to what is described for the Reference Flippers section above. The only difference is that this area displays references that have *not* been placed in attribute groups for display purposes.

3. **Used by Match Code Objects:** If the selected object is the Category indicated in a match code, the match code will display. For example:

More information on match codes is available in the **Matching, Linking, and Merging** documentation.

4. **Used on Page:** Displays publications that the selected object is used in. Additional information about working with publications is available in the **Publication Hierarchy** section of the **Publisher (Adobe InDesign Integration)** documentation.

Images & Documents

The Images & Documents tab displays all assets that are child to the selected classification (e.g., all assets that are housed within that classification). Note that assets can be tied to classifications in two ways: as child products, or via image and document references. Assets are typically referenced to classifications only when the classification contains non-asset children for which the asset is relevant. In any case, assets referenced to classifications are *not* visible on the Images & Documents tab. This is in contrast to how the same tab functions

for products, where the tab displays all assets referenced to the selected product. However, for the displayed assets (those that are child to the classification), the functionality available for interacting with the assets is the same as what is available for referenced assets on a product, which is described in the **Images and Documents Tab** topic in the **Products** section of this guide.

Tables

The Tables tab allows users to view and edit the tables defined for the object. Tables are generally used to present consolidated data across multiple objects, such as object name, part number, and price. For more information, refer to the **Tables** guide.

Status

The Status tab provides information about the status of the object, including revision history, translation status, and approval status. Products and classifications share a common Status tab, which is described in the **Status Tab** topic in the **Products** section of this guide.

State Log

The State Log tab displays the history of the selected object across all workflows. If the object has ever been in a workflow, a flipper is displayed per workflow and the history of transitions of the object within that workflow can be viewed. Detailed information on the State Log tab is available in the **State Log Tab** topic in the **Workflows** guide.

Tasks

The Tasks tab displays all active tasks across all workflows for the selected object, subject to the user's privileges (only tasks that the user has the rights to address are visible). When relevant tasks and privileges are in place, the user is able to act on the tasks from this editor, including to edit data and move tasks through the workflow. More information on the Tasks tab is available in the **Moving Tasks through a Workflow in Workbench** topic in the **Workflows** guide.

Collections

Collections provide a valuable tool for data maintenance tasks. Collections are containers for storing sets of objects from Tree and System Setup, independently of their placement in the hierarchies. A collection can be created via a search or import, and all objects in a collection can be updated at the same time. Collections and collection groups are found in the Collections hierarchy on the Tree tab.

When multiple collections need to be grouped together, they can be put into a 'collection group'. Collection groups can also hold other collection groups. Refer to Creating Collections or Creating Collection Groups in this documentation for more information on each topic.

For more on data maintenance of collections and collection groups, refer to the Maintaining Collections topic.

Temporary Collections

The Temporary Collections node is system-generated to store read-only collections created by a process, such as bulk update background processes, exports, profiles, and Web UI basket. The right-click menu on this node does not allow manual creation of new user collections nor deletion of existing temporary collections.

Temporary collections created by background processes (BGPs) are deleted automatically via the case-sensitive sharedconfig.properties file entry **AutoDeleteBackgroundProcesses.AgeInHours.[processname]=[hours]** when the BGPs are deleted. In this setting, the **[processname]** designation is replaced with the name of the BGP and the [hours] designation is how long to wait before deleting BGPs. For more information on this setting property, refer to the Create a Background Processes Maintenance Plan topic within the System Setup documentation.

For example, running a bulk update BGP creates three temporary collections. Setting the AutoDeleteBackgroundProcesses property with 'BulkUpdate' as [processname] allows the related bulk update temporary collections to be deleted when the bulk update BGPs are deleted, based on the [hours] setting.

Manually deleting temporary collections is necessary when background processes have been manually deleted. On the Maintain menu, click 'Force Delete & Purge' and select one of the following options:

- 'Purge collection contents' - removes the contents of the collection but does not remove the root node.
- 'Purge collection node' - removes the contents of the collection and also deletes the collection root node.

Dimension Dependency and Collections

Collections and search results are dimension dependent. A search in one context can display different objects than the same search in another context.

The following example illustrates how creating a collection from search results can return different objects, based on the dimension dependent values in the context being searched.

This search is performed in the 'English US' context for the value 'red' in the 'Color (Color)' attribute. The search finds four objects with the value.

One of those objects has a translated value of 'rojo' for the language dimension point in the 'US Spanish' context. the other objects have no value for the attribute.

Performing the search again in the 'US Spanish' context returns no records since the value of 'red' does not exist for any of the records in the searched context.

Creating Collections

In workbench, collections can be created in two ways:

1. Using the Search tab, perform a search, and create a collection of the results
2. Using an import file, create a collection of the contents

Regardless of how they are created, if a collection contains less than 10,000 objects, these can be inspected in the Tree hierarchy by expanding the Collection node. The collection will be displayed in an entirely flat structure regardless of any parent-child relations that may exist between the objects, and regardless of which parents / children the objects have when viewed elsewhere in STEP.

> **Note:** While this topic and the Collections section do not address Web UI functionality, the Web UI Collection Content Screen does have the same 10,000 object restriction to allow for the best performance.

In Web UI, objects can be manually added to and removed from a collection. This functionality is not available in the workbench.

Creating a Collection from Search

The most common way to create a collection is through creating a search.

Language-dependent searches and exports

Consider the following when searching and using collections with context-dependent data.

- Because a language-dependent attribute Name or value can be different based on context, Name is not a reliable criterion for repeatable searches. Searching based on an attribute name can return unexpected or no results depending on the currently selected context. Instead, use the Search from List criterion with the ID option to search on the object's ID, which remains the same regardless of the current context or value changes.

  For example, an attribute with Name value of 'Description' in the English context and the Name value of 'Descripción' in the Spanish context. When the Spanish context is selected, searching for attribute Name of 'Description=100%*' returns zero results because no attribute exists in the context with the name 'Description'. However, using the 'Search from List: ID' option (as defined in the Search: Search from List topic), although the search is performed on the selected context, the output file includes data based on the Context parameter on the Advanced step of the Export Manager (as defined in the Export Manager - Advanced topic).

- Searching on the attribute ID along with a wildcard allows exporting results regardless of the context that the search was performed on or the context that was selected for export.

- When exporting search results or exporting a collection made from search results, the context selected when performing the search is used in the 'Displaying # of # results' list of objects found and the Export Manager Advanced tab Context field determines which values are exported.

  If a search or a collection from a search is based on a language-dependent attribute's Name, the export file is blank if the context selected in the Export Manager does not match the context selected during the search or collection creation.

To export objects with their relevant language-dependent attribute values regardless of the context in use during search or collection creation, use the Search from List criterion with the ID option from the dropdown (as defined in the Search: Search from List topic). This ensures that the attribute values are identified by object IDs which is the same for all contexts.

Configuration

To create a collection from search, follow the steps below.

1. Navigate to the Search tab, enter in the needed search criteria, and click Search to verify the results. For more on how to search, refer to the Navigating and Searching topic in the Getting Started documentation.
2. Click the **Save as Collection** button.

3. Select the appropriate parent in the collections hierarchy (either the top collections folder itself, or a collections group folder), enter a collection name (the ID is autogenerated), and click OK.

4. A background process runs, and the new collection is created and saved under the specified folder.

5. Right-click the collection, and run any needed bulk update, or export the objects.

> **Note:** The initial search criteria used to locate the included objects is stored on the collection, which allows for later updates of the collection. To learn more about editing searches to update collections refer to the Maintaining Collections topic.

Creating a Collection from File Import

Collections can be created from a text or CSV import file containing STEP IDs of products, assets, or classifications. Objects in the import file must already exist as the import will not create or update objects, only place them in a collection.

> **Important:** If the import file includes only attribute values or unique keys of the products, assets, or classifications to be added to the collection (and does not include the STEP ID), you must use the above steps for **Creating a Collection from Search**.

To create a collection from a file:

1. In the Tree, right-click the Collections top node or a collection group to determine where the new collection will be saved, and select **Create Collection From File...**.

2. In the **Create Collection From File** dialog, locate the file to be imported.

The **Collection ID** is autogenerated

3. For the **Collection Name** parameter, add a Name for the new collection.
4. For the **File Contains** parameter, select if the import file contains IDs of products, classifications, or assets.
5. Click **OK** to start a background process which will create the new collection.

Creating Collection Groups

Collection groups are containers that can hold collections or other collection groups. Below are instructions for configuring collection groups.

Creating a Collection Group

1. Depending on where you want the collection group to live, either right-click the top-level Collections node or an existing collection group in Tree and select **Create Collection Group...**.

2. In the 'Create Collection Group' dialog enter a **Name** (ID is autogenerated) for the new group.

3. Click **OK**.

Once created, collection groups can be selected to hold new collections, or more collection groups can be created under them. For more on how to create collections, refer to Creating Collections in this documentation.

Maintaining Collections

Collections can be a valuable tool for data maintenance tasks, because they allow a user to group objects independently of their placement in the hierarchies, and they can be updated. As an example, a set of objects with data anomalies could be grouped in a collection via search criteria. Once the data is corrected, the objects with updated information no longer meet the search criteria. Thus updating the collection automatically removes any updated / fixed objects from the collection. In this way, only the objects that still need to be fixed are displayed in the collection.

This topic addresses the various ways users can interact with and maintain collections.

- Delete
- Edit Search Criteria
- Export Data Below
- Refresh Data
- Run Bulk Update
- Republish
- Search Below

Collections can also be maintained via the Web UI. For more information, refer to the Collection Content Screen section of the Web User Interfaces documentation.

Delete

Clicking on the Delete option deletes the Collection node, but does not delete the objects within the Collection. They will still reside under their original nodes in Tree and System Setup. All collections and collection groups below a collection group must be deleted before the parent collection group can be deleted.

> **Important:** If an object is deleted from the collection, then the same object will be deleted from the original hierarchy placement in STEP as well. In this case, it would be best to just updated the collection through proper maintenance of collections such as through an updated search or a bulk update.

To delete the collection node, right-click on the desired collection and select **Delete**.

Additionally collections and collection groups can also be deleted from the Maintain menu, **Delete** option.

For more on creating searches, refer to the Navigating and Searching documentation.

For more on how to use bulk updates, refer to the Bulk Updates documentation.

Edit Search Criteria

Collections created from searches can be edited if needed to reflect the needed objects in the collection.

1. To do so, right-click on the collection and select **Edit Search Criteria**.

2. Once selected, the user will be brought to the Search tab where they can examine the original search criteria, and modify the search criteria if necessary.

Alternatively, if a collection was created using a search criteria, the 'Search URL' will appear in the collection's Description flipper under the Search URL field. The user just needs to copy and paste this information into a browser, and they will be brought to the Search tab with the original search criteria on it where they can make adjustments if needed.

For more information on searches, refer to the Navigating and Searching topic in the Getting Started documentation.

Export Data Below

The Export Manager wizard allows a user to export data on demand and to create or modify an export configuration.

1. If a user wishes to export all objects in the selected collection based on the selected format and the mapped data, they can right-click on the collection and select Export Data Below.

2. Selecting this option will launch the Export Manager where a user can fill out the proceeding steps as needed.

For more information on exporting, refer to the Creating a Data Export topic in the Data Exchange documentation.

Refresh Data

Collections created from search results can be updated for the most up-to-date information and object groupings, as objects in a collection that no longer meet the search criteria will be removed from the collection.

- To start a refresh in workbench, right-click on the collection and select **Refresh**.

Note: The 'Refresh' option is *Only* available if the collection is created from a search.

- To start a refresh in Web UI, go to the collection content screen, select the desired collection, and click the **Refresh collection** action.

> **Note:** For more on how to setup a refresh in Web UI, refer to the Scheduling a Collection Refresh in Web UI topic in the Bulk Updates documentation.

Run Bulk Update

This option allows the user to interact with the objects in the collection in a number of ways. To name a few, the objects could be submitted into a workflow, assigned to a user group, or have an attribute updated.

1. Right-click the desired collection and select Run Bulk Updates.

2. Complete the steps in the Bulk Update wizard to make the same updates to all objects in the collection.

For more on how to use the bulk update wizard, and the various operations that can be applied to collections or a group of collections, refer to the Bulk Updates documentation.

For information on how to schedule bulk updates for collections in Web UI, refer to the Scheduling a Collection Refresh in Web UI topic in the Bulk Updates documentation.

Republish

The Republish action generates events on products, classifications, or assets in the collection. Common setup is to use this option for on-demand creation of a republished event. For example, to generate events for all objects in a collection that has never been published by an event queue.

For more information on events, refer to the Events topic in the System Setup documentation.

1. To republish an event, right-click on the desired collection and select **Republish...**.

Note: Users must have the privilege to maintain event queues in order to use this action.

2. Clicking the action launches a wizard where users can choose the appropriate event queue from the dropdown menu.

3. Users can also enter in a Process Description to give a name to the background process, which can be monitored in the 'Republish Node'.

Search Below

If a certain attribute on some of the items in the selected collection needed to be changed, a user could use this to locate the items.

When a user right-clicks on a collection and selects **Search Below**, it allows the user to search only the items in that particular collection.

Refer to the Navigating and Searching topic in the Getting Started documentation.

Collection Properties and Statistics

Working with and viewing the collections properties, collection statistics, Data Profile tab, or the Log tab can provide a quick overview of the collection itself, and useful information in regards to the objects it holds.

Collection Tab

The Description and Statistics flippers provide information about the selected collection. Below the flippers are described in more detail.

Description Flipper

This displays information about the collection:

Party Hats - Collection

Name		Value
> ID		111807
> Name		Party Hats
> Estimated Amount of Obje...		4
> Search URL		step://search?args0.0=topnodetype%3dproduct%2ctopnodeid%3d121189&search0.0=BelowCriteria
> Last edited By		2016-08-22 11:53:40 by USER8

- **ID:** Shows the collection ID, which is auto generated.
- **Name:** Shows the name of the collection.
- **Estimated Amount of Objects:** Displays the total number of objects in the collection based on the latest 'Refresh' of the collection. The count is not filtered according to Context / Workspace visibility, privilege checks, or object types.
- **Search URL:** Displays *only* on collections created from a search result. A user can copy the URL, paste it into the URL field, press ENTER, and observe the search in the Search tab. It is possible to edit the search if needed. For more on searching refer to the Navigating and Searching topics in this documentation.
- **Last edited By:** Displays the date and time and user who last worked on the collection.

Statistics Flipper

The Statistics flipper gives an overview of which type of objects are included in the selected collection.

In addition to breaking down the objects by type, it will also display the exact number of objects in the entire collection based on the latest 'Refresh' of the collection.

> **Note:** While actually viewing the collection in Tree, it may appear that there are fewer objects in the collection then what is reported by the Estimated Amount of Objects field under the Description flipper or the total objects reported under the Statistics flipper. Examples of why this may happen could be because some objects are not approved for the workspace the user is currently in, and thus do not show, or it could be due to privileges.

Data Profile Tab

The Data Profile tab can display a dashboard to provide a graphical representation of the objects that are in the collection. This can be modified based on the user's requirement.

If a profile has never been created, a user can click on the **Generate Profile** link to create the collection's Dashboard.

If it has already been created, it is recommended to update the profile when viewing if it has not been updated recently.

For more information on how dashboards and data profiling work, refer to the Data Profiling documentation.

Log Tab

The Log displays details about the creation and modification of the collection, details about which user performed what actions, and the number of objects in a collection when a collection is refreshed.

Entities

This topic covers information specific to the Entity super type that is important to know when working with entities. For general object maintenance information (applicable to all object types rather than specific to entities), refer to the **All Objects** topic within this guide.

A STEP entity can be any object not defined as a product. Entities are commonly used to model customer-related data, such as contacts, addresses, markets, or customers, though they can be used for any number of data modeling scenarios, including modeling of reference data.

Entities differ from products in that they do not contain all of the product-specific functionality like specification attributes, value inheritance, or tables. As entities can only use description attributes, the application of category-specific attributes is not supported. Therefore, attributes are applied to entities strictly via object type validity and all entity instances of a particular object type will have the same attributes available for population. Additionally, entity handling is limited for publishing (e.g., as part of print publishing solutions as defined in the **Publisher (Adobe InDesign Integration)** documentation), and you cannot translate entities using a background process.

Entities may or may not be subject to approval, dependent upon the revisability settings (globally revisable entities are the same in the Main and Approved workspaces, while workspace revisable entities adhere to standard approval concepts). This provides a great deal of freedom in determining how entities are handled, specifically in terms of how events are generated and processed. For more information, refer to the **Revisability on Entity Object Types** section of the **Getting Started** documentation or the **Events** section of the **System Setup** documentation.

Entities cannot be linked into classifications, though configuration of entity references allows for determination of a hierarchical display (with source displayed as child to target, or vice versa). In effect, this makes classifications unnecessary for use with entities as entities can be classified via entities. Additional information on this is available in the **Entity Reference Types** section of the **System Setup** documentation.

However, entities do retain the standard data modeling capabilities and provide even more configurability. The Revisability parameter allows you to define an entity object type that does not have to be approved and also determines how events are processed.

Entity Hierarchy

Any number of entity hierarchies can be added to any system. For example, you may set up address hierarchies, customer hierarchies, market hierarchies, and so on. Entities are represented by icons chosen as part of the implementation process and will likely differ on each system. The following is an example of an entity hierarchy.

For more information on hierarchy setup, refer to the **Object Types and Structures** section of the **System Setup** documentation.

Entity Editor

Once the entity hierarchy is created and description attributes are applied to the entity object types, the next logical step is to start entering values.

Every entity editor includes a References, Referenced By, Status, State Log, and Tasks tab. The labels on these tabs remains constant, while the label of the first tab differs based on the object type. Each is defined below.

> **Note:** Only description attributes can be applied to an entity object types and will appear in the entity editor. Specification attributes are not allowed on entities.

For example, the image above shows an entity modeled as an address. The entity object has several description attributes: City, Country, State, Street, and Zip. In addition to the Name attribute, these attribute can be modified and maintained. Since this entity object type has been modeled to be globally revisable, approval is not applicable. Therefore, the Approval Status field is not shown.

References

You can view associated references of an Entity object by selecting the References Tab. In this tab, you can maintain references from the selected entity to other objects.

Selecting the References tab on an Entity Object will list valid References. In this tab it is possible to maintain references from the selected entity to other objects.

Refer to **Reference Types** topic in the **System Setup** documentation for more information.

An entity can reference a number of different objects. It is possible to create:

- Entity-to-Entity references
- Entity-to-Product references
- Entity-to-Classification references
- Entity-to-Asset references

In the example below, one Entity-to-Entity reference type is valid on the selected entity object. Clicking the plus sign (+) will open a large editor where you can select objects to be referenced. Alternatively, you can type the name of an object in one of the white target fields and press 'Enter.'

- Targets can be unlinked by clicking the delete button ☒.
- Metadata attributes can be linked on to the target reference in References Tab.

- The attributes that are linked on to the target reference will be editable once the target reference is linked to the entity reference type as shown in the above screenshot.

  For the meta attributes to be visible on target reference type, add the required description attributes under Valid Attributes in System Setup > Reference Type.

Referenced By

Selecting the Referenced By tab on an entity will list valid Reference Types. In this tab, you can maintain references from other objects to current entities.

Refer to **Reference Types** in the **System Setup** documentation for more information.

An Entity Object can reference a number of difference objects. It is possible to create:

- Product-to-Entity reference
- Entity-to-Entity reference
- Asset-to-Entity reference
- Classification-to-Entity reference

In the example below, one Entity-to-Entity reference type is valid from an Entity to the current selected Entity Object. Clicking the plus sign (+) will open a large editor where you can select objects from where a reference to the current selected Entity Object should be made. In the example, a reference from an entity named 'Customer A' is made to the current selected Entity Object.

- Metadata attributes can be linked on to the target reference in Referenced By Tab.

- The attributes that are linked on to the target reference will be editable once the target reference is linked to the entity reference type as shown in the above screenshot.
- For the meta attributes to be visible on target reference type, add the required description attributes under Valid Attributes in System Setup > **Reference Type**.

Status

A record of all the changes that have been made to a currently selected entity will be displayed. This record will allow you to examine the user that made the change and when the change was made.

You can purge past revisions or revert the old revisions. There will be no Workspace, Translation, or Approval Status flipper as Entities can be created as globally revisable, meaning they are the same in both the Main and Approved workspaces.

However, Workspace, Translation, and Approval Status flipper will be displayed if we create entity object type as 'Workspace Revisable' as illustrated in below images.

Example of object type definition

Example status tab for workspace revisable object

State Log

The State Log tab displays the history of the selected object across all workflows. If the object has ever been in a workflow, a flipper is displayed per workflow and the history of transitions of the object within that workflow can be viewed. Detailed information on the State Log tab is available in the **State Log Tab** topic in the **Workflows** documentation.

Tasks

The Tasks tab displays all active tasks across all workflows for the selected object, subject to the user's privileges (only tasks that the user has the rights to address are visible). When relevant tasks and privileges are in place, the user is able to act on the tasks from this editor, including to edit data and move tasks through the workflow. More information on the Tasks tab is available in the **Moving Tasks through a Workflow in Workbench** topic in the **Workflows** documentation.

Products

This topic covers information specific to the Product super type that is important to know when working with products. For general object maintenance information (applicable to all object types rather than specific to products), refer to the **Object Maintenance in the Tree Tab** topic within this guide.

In STEP terms, a product is a part number, a stock number, an order number, a catalog number, a product number, etc. In other words, any item that a company sells that can be ordered.

Product Hierarchy

The foundation for a product-centric STEP installation is the Product Hierarchy / Primary Product Hierarchy. The product hierarchy consists solely of objects of the product super type. The product hierarchy is an organized hierarchy where all products in the workbench are stored. This is also where products and product attributes are linked. Although configurable, the product hierarchy is usually a multi-level hierarchy—each level controlled by its own unique object type. Super users can control the naming convention(s) used to categorize the products at their different levels.

Inheritance of attributes and values is supported within the Product Hierarchy and the hierarchy is usually designed to take advantage of this capability, with objects classified according to similar characteristics. More information on inheritance is available in the **Inheritance in the Product Hierarchy** topic in this guide.

A portion of a sample hierarchy is shown below. Categories are represented by folder icons, while discrete objects are represented by cubes.

All objects of the product super type must exist in the product hierarchy, and may exist only once (e.g., each object can have only a single parent). The primary purpose of the product hierarchy is proper attribution of products. That is, in the product hierarchy, products should be grouped according to their similar properties so that inheritance of attributes, attribute values, and references can best be used. Based on this, it is evident that the Product Hierarchy is not intended to be used for modeling website hierarchies or other taxonomies (e.g., merchandising hierarchy, sales hierarchy, etc.) where an object can be represented multiple times. When a product needs to "live" in more than one location, that can be accomplished using classification hierarchies. In this case, the product continues to exist in the product hierarchy (and this is considered its true place of residence). It is then linked into one or more classification hierarchies using references.

Product Editor

The Product Editor is displayed when an object of the product super type is selected in Tree.

1. The **Product** tab (known as the Product Editor) is the primary interface for working with product objects in the workbench.
2. The **Description** flipper displays basic information about the object. Additional information about the data displayed is described in the Editing Objects in Tree topic within this guide. Note that some information displayed is common for all implementations, while other information is specific to the data model and configuration of each system.
3. If the object has a **primary image** referenced, a thumbnail version of it will display. The reference type to be used for the thumbnail display is controlled in System Settings (on the Users & Groups node), and additional information on this is available in the Primary Image Type topic in the System Setup. Additional information on references in general is available in the Reference and Link Types topic in that same guide.
4. **Specification attributes** are displayed in flippers, with the flipper name matching the attribute group. Flippers can be expanded / collapsed by clicking the magnification icon. Note that when attribute groups have sub-groups, configuration determines whether the parent group or the child sub-group is displayed as the flipper name. This is set via the 'Product Editor, Group attributes by top group' parameter in System Settings (on the Users & Groups node), and additional information on this is available in the Product Information Manager Default Settings topic in the System Setup. More information on attributes in general is available in the Attributes section in that same guide.
5. Attribute values can be edited by clicking into any editable field. Additional information on the various editing options is available in the Editing Objects in Tree topic within this guide. By default, attributes are displayed in alphabetical order within each flipper. However, if an attribute display sequence has been configured, this will

override the alphabetical sorting. More information on attribute display sequence is available in the Attribute Display Sequence topic in the System Setup.

Additional Editors

Refer to the additional topics listed below for information on the other editors available on products.

- **Category Profile:** Allows users to configure and view profiling data and dashboards for the objects under the selected node. Refer to the **Data Profiles** topic in the Data Profiling documentation for more information.
- **Commercial:** Allows users to add and edit commercial terms for the object. Commercial data / terms lists are often used to store pricing information. Refer to the **Commercial Data** section of the **Publisher (Adobe InDesign Integration)** guide for more information.
- **Images & Documents:** Allows users to view and edit assets referenced by the object (or inherited from parental objects). Refer to the **Images & Documents Tab** topic within this guide for more information.
- **Product Variants:** Allows the user to generate and manage a family of products, which are basically the same, only varying on the values of a small sub-set of their attributes. For example, clothing and shoes both offer good use cases for product variants as shoes or clothing items may come in multiple sizes and colors, but are otherwise identical. The product family holds all data for the item, e.g., a particular shoe, while the variants would hold only the various combinations of the color and size varieties (e.g., size 7 red, size 8 blue, etc). The Product Variants tab is only present if the system has been configured to support variants. For more information on this, refer to the **Product Variants** documentation in the System Setup.
- **Proof View:** Allows users to preview a close representation of how a product will look when mounted onto an InDesign page based on a selected publication version and product template. For more information, refer to the **Print Proof View** section of the **Publisher (Adobe InDesign Integration)** documentation.
- **Referenced By:** Allows users to view all objects referencing the current object, and add / remove / edit these references. Refer to the **Referenced By Tab** topic within this guide.
- **References:** Allows users to view all objects that the current object references, and add / remove / edit these references. Refer to the **References Tab** topic within this guide.
- **State Log:** Allows users to view the recent history of the object across all workflows in which it has been entered. Refer to the **State Log Tab** topic in the **Workflows** documentation for more information.
- **Status:** Allows users to view basic information about the object, including revision history, translation status, and approval status. Refer to the **Status Tab** topic within this guide for more information.
- **Sub Products:** Allows users to view and edit all child objects of the selected object in a table form. Refer to the **Sub Products Tab** topic within this guide for more information.
- **Tables:** Allows users to view and edit the tables defined for the object. Tables are generally used to present consolidated data across multiple objects, such as object name, part number, and price. For more information, refer to the **Tables** guide.
- **Tasks:** Displays all active tasks across all workflows for the selected object, subject to the user's privileges (only tasks that the user has the rights to address are visible). When relevant tasks and privileges are in place, the user is able to act on the tasks from this editor, including to edit data and move tasks through the workflow. More information on the Tasks tab is available in the **Moving Tasks through a Workflow in Workbench** topic in the **Workflows** guide.

Inheritance in the Product Hierarchy

Inheritance in STEP is the concept that when the value of an attribute is defined in a parent product, all the child products that exist under the parent product can inherit the value - meaning that the value is present on the child, as well as the parent. If the attribute is also valid on the child (in addition to the parent), then the value can be locally edited on the child (e.g., a different value supplied so the child no longer inherits the value from the parent). Note that value inheritance also applies to references, meaning that if a reference is populated on a parent, it is also available on the child in the same way as an attribute value. However, references must be explicitly configured for inheritance to be in place, while attribute values will automatically inherit to child products.

In addition to value inheritance, attribute inheritance is also available in the product hierarchy. This means that attributes can be linked to specific nodes / categories so they only appear for those categories and their children. For example, consider a company that manages data for both batteries and clothing. Size might be applicable to both categories of objects since both batteries and apparel have sizes assigned. However, sleeve length and voltage are characteristics applicable for clothing and batteries, respectively, and it could be confusing to have a 'Voltage' attribute on a clothing item. To avoid this, the 'Voltage' attribute could be linked to the 'Batteries' category, while the 'Sleeve Length' attribute could be linked to an 'Upper Body Apparel' category.

Inheritance perpetuates throughout the hierarchy, no matter how many levels are present (e.g., inherited attributes and values appear on children, grandchildren, etc.). When attributes are considered applicable to all products, regardless of category, they are called 'global attributes'. For example, attributes such as Price, Description, and Manufacturer Name. Thus, these attributes are linked to the top level in the product hierarchy and are inherited down to all products beneath, no matter how many levels there are.

Attribute inheritance only means that the attributes are *available* for all of the products beneath where they are linked. The process of linking attributes to different levels does not have anything to do with the actual values that will go into the attributes for any particular product. In the 'Voltage' example, when linking that attribute, you are only concerned with making that attribute available to all the battery products—not with the actual voltage for any given product. However, if many batteries under a parent shared the same value, the value could be populated on the parent to inherit down to the children. Any children varying from the parent value could then be edited individually, while those having the same value as the parent do not need to be updated further. Note that attribute inheritance within the product hierarchy is only available with specification attributes, and is not available with description attributes. Further note that this topic focuses on inheritance solely within the product hierarchy. However, it is important to be aware that attribute inheritance can also be used within classification hierarchies that are used to organize product objects. Attributes can be linked to a classification, making them available for all products linked into that classification (or a child classification). More information on attribute inheritance with classifications is available in the **Classifications** topic within this guide, and within the **Attribute Links** topic in the **System Setup** guide.

> **Important:** Value inheritance is a powerful feature, but care should be taken not to maintain values at a level too high in the hierarchy. With such a setup, a single change could mean that thousands or millions of products would have to be updated in downstream systems and many systems are not geared to handle massive feeds like that.

When working with products and/or creating new products, users should be mindful of inheritance, considering both the inheritance of the available attributes, as well as their specific values or references. It may be helpful to consider the following:

- Is the hierarchy granular enough to allow products within the category to be grouped so that all products only have the relevant attributes, or are additional category levels required to obtain this granularity?
- Which attributes are required for the products in the category and/or subcategories?
- If product variants are used, which attributes should be maintained at the family level and which ones should be maintained at the variant level?

Note: Data can also inherit from dimensions (e.g., language or country). More information on this is available in the **Dimension Dependent Data** section of the **Contexts** topic in **System Setup**.

Linking Attributes to Products

To make attributes valid for products, they must be linked to the appropriate tree nodes in the product hierarchy. Some attributes will be global attributes (applicable to all objects in the product hierarchy) and are linked to the "Product Hierarchy" root node. These global attributes are then valid for all products. Other attributes apply only to specific categories of objects, and are then linked directly to those categories, making them available for all objects within that category (if also set as valid for those object types). Attributes should not be linked to individual leaf objects, as each one would have to have the link individually applied. Instead, attributes should be linked to some parental folder in the hierarchy above the objects needing to use the attribute.

Before proceeding, be aware of the following:

- Attributes can be linked to objects of the product or classification super type. In either case, the steps are comparable and the attributes are made available for the children "under" the node at which they are linked (being mindful that "under" means "actual children" in the product hierarchy, whereas it means "objects with a reference to" when dealing with classifications).
- Linked attributes apply only to objects of the product super type. For example, linking attributes to a classification object that holds assets does not make those attributes available on the child assets.
- Only Specification attributes can be linked to products or classifications. Description attributes cannot be linked attributes.

Linking Attributes

1. Select the product group or classification and click the **References** tab.
2. Expand the appropriate flipper (**Linked Attributes from Product Hierarchy**on product objects or **Attributes** on classification objects), then click **Link to Attribute**.

3. In the standard search / browse window that displays, locate the appropriate attribute(s) and click **Select**.

Localizing an Attribute Link

Local attribute links can be created to override inherited attribute links.

1. Select any existing inherited attribute link and right-click on the row indicator.
2. Select the **Create Local Link** option.

This creates a local version of the link where attributes on the reference can be locally edited. Local links are removed the same way as inherited links, though removing a local link re-applies the inherited link.

Unlinking a Linked Attribute

Unlinking an attribute does *not* delete the attribute from STEP; it removes the link so the attribute is no longer available for population on the selected node (and child nodes, if applicable). Note that attribute links must be removed from the same node to which they were added. In other words, trying to remove an inherited attribute link is not possible and the 'Remove Link to Attribute' option will be disabled. To remove an inherited link, it must be removed on the parental object that holds the link. However, care should be taken in doing this as it will remove the link for *all* child groups, and will need to be re-linked at those lower child levels if it is still needed there.

1. On the References tab of the object, expand the appropriate flipper (**Linked Attributes from Product Hierarchy** on product objects or **Attributes** on classification objects).
2. Right-click on the row indicator and select **Remove Link to Attribute** from the context menu (or use Ctrl + "-"). Multiple attributes can be unlinked simultaneously by multi-selecting.

> **Note:** If an attribute has been linked locally, removing the link only removes the local link, and the inherited link will again take effect.

Additional methods for maintaining attributes links

Attribute links can be added and removed in a number of ways, in addition to what has been described above. These include:

- **References** tab of the attribute itself
- **Maintain** menu, then **Link** menu when a product or classification is selected
- **Edit** menu, then **Link to Attribute** / **Remove Link to Attribute** menu when a product or classification is selected

All methods for adding and removing attribute links are equivalent, producing the same end result.

Working with Inherited Values

There are many advantages to setting common values:

- When an update is needed, the value is only entered once in the product group instead of – potentially – separately, across hundreds of products.
- When new products are added to the group, they automatically inherit the product group's values.
- The translation of product group values only need to be performed once, as opposed to translating the same value every time for individual products.

As mentioned above, it is possible to set attribute values for an individual product, but consider a situation where all products within a product group share common attribute values. For example, a set of hats that share a common description and features.

There are two ways to approach this: 1) keep all common values with the individual product or 2) set the common value at a higher level in the product hierarchy. By setting the value higher in the hierarchy, the attribute value is inherited down to all products beneath.

The image above shows three inherited values, which are designated by a green down arrow (⬇).

The value is set at the product group, or in this case, 'Hats and Caps Sales Items'. Therefore, all products beneath will inherit the same value.

It is possible to override an inherited value by setting a different value at any subordinate level, e.g., the product level. This is called a **localized value**. However, this requires that the attribute be valid for the child object type (as is the case for the inherited values shown in the screenshot above). Attributes that display as inherited (indicated by the green arrow) but not editable (e.g., value field is yellow rather than white) are not valid for the object, so they can only have a common value with all sibling products, which is inherited from a parent higher in the hierarchy. Detailed information on setting validity of attributes is available in the **Validity on Specification Attributes** topic in **System Setup**.

If a value is localized, then subsequently deleted, the product will again automatically inherit the parental value. Therefore, it is impossible to have null (blank) values for inherited attributes (unless the parental object has the null value).

For information on working with and/or setting up inherited reference values, refer to the **Inheritance Example for a Reference** section of **System Setup**.

Images & Documents Tab

When working with products, the Images & Documents tab displays thumbnails of all assets that are referenced by the selected product, or inherited from a parental object referencing the asset. When working with classifications, this tab displays all assets that are child to the selected classification. The functionality for working with the displayed assets is the same, regardless of whether a product or classification has been selected.

If more than 50 assets are present, the **Next** / **Previous** buttons are enabled at the top of the screen, allowing users to page through sets of assets (50 at a time). Filtering functionality is also available and is especially useful when working with large sets of assets. The options for filtering are described below.

Along with each thumbnail, basic information about the asset is displayed, including asset name, pixel size, file size, and reference type used to link the asset to the selected object.

Interacting with Assets

From the Images & Documents tab, several actions can be taken with the displayed assets.

Edit asset

By right-clicking on the asset, users can edit any assets on the page, open an external viewer, save the image to a disk or local PC, and view the image on a larger scale.

Edit reference type

The type of reference that links the object and the asset is displayed in a dropdown below the asset thumbnail. Selection in the dropdown will be disabled (grayed out) if there is only one valid reference between the object type and asset type. If multiple valid reference types are available, selection of the reference type is enabled and can be edited from this location. More information on references is available in the **Reference and Link Types** topic in the **System Setup** documentation.

Filter the displayed assets

A user can filter the displayed assets by entering the name of the asset in the Filter filed. This action displays assets that have the entered value as part of the asset name, as shown below.

Note: The filter automatically applies wildcard functionality so explicit entry of wildcards (*) is not needed. Entering an asterisk will cause the system to search for assets with an asterisk in their name.

To remove the applied filter, delete the characters in the filter field and press the Enter key on your keyboard.

Navigate to asset

The asset name is shown directly below the asset thumbnail as a hyperlink. Clicking the hyperlink navigates directly to the asset in the classification structure.

Product Overrides

Product overrides are alternate versions of products and product families that may have differing values, references, links, and structures. Attributes and values applied to the product family are inherited to the product override and can be replaced with local values and references on the product override. Product overrides allow product objects to exist in multiple locations in the product hierarchy and are the primary building blocks for many print product presentations. A product override allows for the creation of 'pseudo' product families that are flexible to ever-changing print presentations. They can be thought of as a workaround for when an existing product family does not contain the exact products needed for a publication layout and/or its accompanying STEP table(s).

A product override folder can include products from various "standard" (e.g., non-override) product families. Similarly, a product override leaf object can live under a different product folder (override or standard) than the folder in which its corresponding standard object resides.

1. Tree Structure: For clarity, it is recommended to house product overrides in a separate sub-hierarchy from standard products.

2. Override Interface: The product override object makes it possible to override the children, attributes, and references of a product / product family. This is useful in order to publish a limited version of a product family without modifying the object itself.

Example

In this example a product family **Ski Jacket Pro** has three products. A product override **104061** is created and based on the product family **Ski Jacket Pro**. Attributes, values, and references are inherited from the product family **Ski Jacket Pro** to the product override folder and can be replaced with local values and references on the product override.

Two products from the product family **Ski Jacket Pro** are linked into the product override folder (SKU 00001 and SKU 00002). The product override only contains a subset of the products included in the original product family **Ski Jacket Pro**, as SKU 00003 is not included.

> **Important:** Values and references inherited to a product override will not be inherited to products linked into the product override. These products will have their values inherited from their original structure instead.

Selecting the Product tab or References tab on the product-override will indicate with a yellow icon ([abc]), if an attribute or reference is inherited from an overridden product. Inherited values and references can be replaced with local versions, assuming the relevant attribute and/or reference is valid on the relevant product override object type.

Creating a Product Override

1. In **Tree**, select an object for which an override should be created.
2. Right-Click and select **New Product-Override**
3. In the Create Product-Override dialog,
   - Click an Object Type
   - Key in ID and Name
   - **Optional:** Click the ellipsis button ([...]) to select a product family to adapt values, references, and links from. The product-override will inherit all values, references, and links from the selected product family.

- ○ **Optional:** Click 'Adopt Children' if the product-override should also include all products from the overridden product family.

4. Press **Create** to create the product-override.

Linking Products into a Product Override

1. In **Tree**, select the product override
2. Right-click the product override and select **Add Children to Override**
3. **Search** or **Browse** for the products to be linked into the product override

Removing Products from the Product Override

1. In **Tree**, select the product override
2. Expand the product override and select the product to be removed
3. Right-click and select **Remove Child from Override**

Creating a Subordinate Product Override

1. In **Tree**, select the product override
2. Select a product linked into the product override
3. Right-click the product and click **Convert to Product-Override**

The product will be converted into a product override. Values, references, and links will get inherited from the overridden product.

Referenced By Tab

The Referenced By tab is where all references of which the selected object is the target (e.g., all the objects that the selected object is referenced by) can be viewed and edited (assuming proper privileges are in place). In addition, if the object is used by product overrides, has a match code acting on it, or is used by any publication, that information can be viewed on this tab. Finally, privileges assigned to the product can be added and edited from this location, and subproducts that are present only in other contexts can be viewed (if the object is of a dimension-dependent object type).

The display of the Referenced By tab on a product will vary slightly from system to system, based on the data model.

1. **Reference Flippers:** References can be placed in attribute groups for display purposes. All references for which the selected object is a valid target that have been placed in attribute groups will display first on the screen, with the flipper title being equal to the name of the attribute group. References can be added by clicking the (**+**) on the reference. This will open a dialog allowing the user to select a source for the reference, and a reference will be created from the object selected in the dialog to the currently selected object that you are standing on (e.g., current object = target, dialog selection = source). If any attributes are available on the reference and editable, they can be edited within this interface. References can be removed by clicking the (**X**) on any existing reference. Additional information on configuring and working with references is available in the **Reference and Link Types** topic in the **System Setup** documentation.

2. **Referenced by Products, Classifications or Entities:** The functionality is identical to what is described for the Reference Flippers section above. The only difference is that this area displays references that have *not* been placed in attribute groups for display purposes.

3. **Used By Product Overrides:** Displays product override objects that are based on the selected object. More information on product overrides is available in the **Product Overrides** topic in this guide.

4. **Linked into Product Overrides:** Displays product override objects that have the selected object as a child. More information on product overrides is available in the **Product Overrides** topic in this guide.

5. **Used by Match Code Objects:** If the selected object is the Category indicated in a match code, the match code will display. For example:

More information on match codes is available in the **Matching, Linking, and Merging** documentation.

6. **Used on Page:** Displays publications that the selected object is used in. Additional information about working with publications is available in the **Publisher (Adobe InDesign Integration)** documentation.

7. **Applied Privileges:** Displays the privileges that have been applied to the selected node. Privileges can be added using the Add Privilege link, and can be removed by clicking on the row indicator and selecting 'Remove Privilege'. Existing privileges cannot be edited from this interface. Detailed information on creating and editing privileges is available in the **Privilege Rule**s section of the **System Setup** guide.

8. **Visible Sub-Products in Other Contexts:** Displays subproducts that are visible in another context, which is only applicable if the object type is dimension-dependent. Note that it is *not* recommended to make product object types dimension-dependent; instead, it should only be data *on* objects (e.g., attributes and references) that are dimension-dependent. As a result, this flipper is rarely used.

References Tab

The References tab is where all references of which the selected object is the source can be viewed and edited (assuming proper privileges are in place). In addition, if the object has associated index words, is used by any publication, or has any linked attributes, that information can be viewed and edited on this tab.

The display of the References tab on a product will vary slightly from system to system, based on the data model.

1. **Reference Flippers:** References can be placed in attribute groups for display purposes. All references for which the selected object is a valid source that have been placed in attribute groups will display first on the

screen, with the flipper title being equal to the name of the attribute group. References can be added by clicking the (**+**) on the reference. This will open a dialog allowing the user to select a target for the reference, and a reference will be created from the currently selected object to the object selected in the dialog (e.g., current object = source, dialog selection = target). If any attributes are available on the reference and editable, they can be edited within this interface. References can be removed by clicking the (**X**) on any existing reference. Additional information on configuring and working with references is available in the Reference and Link Types topic in the System Setup.

2. **Ungrouped References:** The functionality is identical to what is described for the Reference Flippers section above. The only difference is that this area displays references that have *not* been placed in attribute groups for display purposes. If *all* references that are valid for the selected object have been placed in attribute groups, the **Ungrouped Classification Links** and **Ungrouped Product References** flippers will not be present.

3. **Index Words:** Allows users to view index words linked to the currently selected object, and to link index words using the **Add Index Words** link. Index words are maintained in a dedicated hierarchy where it is possible to maintain the word itself along with a sort word. More information is available in the Creating an Index Words Structure topic in the Publisher (Adobe InDesign Integration) documentation.

4. **Publications:** Publications that the currently selected product is linked to are displayed, and new links can be created using the **Link to Publication or Section** link. Additional information about working with publications is available in the Publisher (Adobe InDesign Integration) documentation.

5. **Linked Attributes:** Attributes that are linked directly to the selected product or inherited from a parental node in the hierarchy display under the **Linked Attributes from Product Hierarchy** flipper. The exact columns available will depend on the data model and the attributes that have been made valid on product attribute links. Whether or not the various attributes are editable will also depend on the setup of the data model. However, an ID and Name field are always shown, with the attribute name being a hyperlink that can be used to navigate directly to the attribute. An Attribute Groups column is also present, displaying the attribute group(s) that the attribute is in. A Mandatory column is present and if checked, the object cannot be approved until a value has been provided for the attribute. Note that mandatory settings on the attribute itself apply globally, while mandatory settings on the attribute link apply only to objects that are child of the node at which the attribute is linked. More information on mandatory settings is available in the Mandatory Attributes topic in the System Setup. If the attribute link is inherited (indicated by a green down arrow, ⬇, in the row indicator), the 'Inherited from' column will display the parental node where the attribute has been linked, which is hyperlinked for easy navigation. More information on linked attributes is available in the Inheritance in the Product Hierarchy topic within this guide and in the Attribute Links topic in the System Setup.

   The **Linked Attributes from Classification Hierarchy** flipper is comparable to the product hierarchy counterpart described above, though shows attributes linked to a classification that the object is a member of (e.g., has a reference to), rather than attributes that are linked to a parental product. The same considerations apply in that the exact columns available will vary based on the data model, with ID, Name, Attribute Groups, and Mandatory columns always being present and functioning in the same way as for product attribute links. Note that objects shown in the 'Inherited from' column in this case are parental objects not of the selected object itself, but instead of a classification that is parent to the classification that the selected object references.

Status Tab

The Status Tab provides general information about objects, including revisions, translation status, and approval status. For products and classifications, the Status tab displays the same information, regardless of the object type. Publications, attributes, entities, and assets have slightly different information available, though much of it is common to what is described below.

| Product | Sub Products | References | Referenced By | Images & Documents | Commercial | Tables | Category Profile | Proof View | **Status** | State Log | Tasks |

Revisions 1

Revision	Created	Edited	Major	User	Comment
0.4	Fri Oct 23 16:49:50 EDT 2015	Tue Jan 19 15:42:51 EST 2016		USER	Auto Generated
0.3	Fri Oct 16 09:39:06 EDT 2015	Fri Oct 16 09:39:06 EDT 2015		USER	Complete approval
0.2	Tue Sep 22 14:14:02 EDT 2015	Tue Sep 22 14:14:02 EDT 2015		USER	Auto Generated
0.1	Fri Feb 13 11:36:40 EST 2015	Fri Feb 13 11:36:40 EST 2015		STEPSYS	

Workspaces 2

ID	Name	Path	
Main	Main	Main	0.4
Approved	Approved	Main/Approved	0.3

Translation 3

Master : [dropdown]

Source	Target	Status	

Approval status in all contexts 4

Context	Approval Status
Danish DK	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
English UK	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
English US	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
French Belgium	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
French Canada	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
French FR	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
Germany German	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015
Israel Hebrew	✖ Last Approved on Fri Oct 16 09:39:06 EDT 2015

Hidden values 5

Attribute	Visible in workspaces	Visible in dimensions	Value
Long Item Description	Approved, Main	Country=AllCountries, Language=en-US	Red carpet worthy pumps in scarlet suede is sure
Packaging Type	Approved, Main	Country=AllCountries, Language=std.lang.all	Box
Supplier Name	Approved, Main	Country=AllCountries	Products Galore

Diagnostics 6
No problems found

1. **Revisions:** In STEP, historical versions of objects are stored as revisions. A revision thus represents a historical "snapshot" of an object. The Revisions flipper provides a record of the revisions that have been made to the currently selected object, including when changes to the object were made and who made them. Via right-click, users are able to purge old revisions or revert to previous revisions. For more information on revisions, including how they are generated and how they should be managed, refer to the **Revisions** topic in the **System Setup** documentation.

2. **Workspaces:** All the workspaces that the selected products are in will display, as well as the revision number that exists in that workspace. Generally speaking, if the object has been edited since it was approved, the Main and Approved workspaces will hold different revisions. However, it should be noted that not all changes to an object generate a revision. More information on this is available in the **Revisions** topic in the **System Setup** documentation. For more information on workspaces in general, refer to the **Workspaces** topic in the **System Setup** documentation.

3. **Translation:** Translation relations (sources and targets) and status (e.g., Up to date, Re-translation needed, etc) of the translations display. For more information, refer to the **Translations** documentation.

4. **Approval status in all contexts:** Displays the approval status of the object in each context on the system. More information on approvals is available in the **Approval of Objects** topic in the **Getting Started** documentation. More information on contexts is available in the **Contexts** topic in the **System Setup** documentation.

5. **Hidden values:** Displays hidden inherited values on the object. Hidden values are those that are inherited from another dimension (e.g., language or country) rather than from a parental object. More information on this is available in the **Dimension Dependent Data** section of the Contexts topic in the **System Setup** documentation.

6. **Diagnostics:** Displays any issues with the object found by system diagnostics. If a problem has been found, the information can be copied by clicking the file link.

Sub Products Tab

When the Sub Products tab is accessed on an object of the product super type, all direct children of the selected node are displayed. If privileges allow, data can be edited on the displayed objects by clicking directly into any editable field. Standard editing capabilities are available within this interface (as described in the **Editing Objects in the Tree Tab** topic within this guide) including copy / paste functionality using Ctrl + C and Ctrl + V.

Right-clicking on any field within the table will expose additional options, including Copy, Paste, Hide Equal, and Mark Different selections - all of which are self-explanatory and can be especially useful when editing multiple objects.

Note that two views are available using the **Rotate Table** option. As shown above, the view can be organized to have attributes on the vertical axis. As shown below, the table can also display products on the vertical axis. Also note that right-clicking within the header field exposes different options than within the data fields, including an option to add a product.

Selecting **Add Product** opens a Create Product dialog allowing the user to input data to create a new object, which will be added as a child to the currently selected node. The options available in the dialog are based on the data model defined in System Setup. For example, the object type selection will vary based on the allowable object types under the selected parent, and ID will only be available for population if the object type being created does not have autogenerated IDs applied.

Note: The same functionality is available using the **Add Product** link at the bottom of the Sub Products editor.

Recycle Bin for the Tree Tab

Objects in the Tree tab Recycle Bin have been deleted from the Tree tab. For information on deleting objects from the Tree, refer to the **Deleting Objects in the Tree Tab** topic within this **Getting Started** documentation.

For information on the System Setup Recycle Bin, refer to the **Recycle Bin for System Setup** topic in the **System Setup** documentation.

Considerations

- Objects in the recycle bins are not included when searching from the **Search** tab, nor from **Goto**. Recycle bin objects can be searched using the Search in recycle bin option defined below.

- Attribute values of objects in the recycle bins cannot be edited. If editing is required, the object must be revived.

In the Web UI, displaying an object that is in the Recycle Bin displays recycle bin images in the background, as shown in the image below to indicate it is no longer in the primary product hierarchy. Viewing objects in the Recycle Bin is allowed when the 'Show Recycle' parameter is checked in the Web UI Tree Navigator component. For more information, refer to the **Tree Navigator Component** topic.

To remove the recycle bin background, follow the Resolving Deleted Objects steps below to revive the object, or permanently delete the object to remove it from displaying in Web UI.

Resolving Deleted Objects

Deleted objects in the Tree Recycle Bin can be managed as a group from the Recycle Bin node or individually.

The Tree Recycle Bin can include workspace revisable objects (those that allow approval) which are flagged with 'in Use' if they are in the Approved workspace and flagged with 'Not In Use' when they have not been approved. For details, refer to the **In Use and Not In Use Objects** section of the **Approval of Objects** topic in the **Getting Started** documentation.

Group actions

To address all objects in the Tree Recycle Bin, right-click the Recycle Bin node and choose one of the available options described below:

- **Search in recycle bin** searches for deleted objects in this recycle bin. In Oracle-based systems, by default this includes both ID and Name, while the default for Cassandra-based systems is by ID but allows searching Name via an Advanced option.

  The options in the Advanced flipper vary based on the type of database in use.

Cassandra Database Options	Oracle Database Options
☐ Search in Recycle Bin Search [ ] 📍 Advanced ☐ Match Case on Names ☐ Include Names (can be time consuming) ☐ Regular Expression	☐ Search in Recycle Bin Search [ ] 📍 Advanced ☐ Match Case on Names and Values ☐ Include Inherited Values ☐ Exclude values ☐ Regular Expression ☐ Include Data Containers
Match Case on Names – when checked, capitalization provided in the search field for an object must exactly match the name. **Include Names (can be time consuming)** – when checked, searches for matches on name and ID; when not checked, only IDs are searched. **Regular Expression** – when checked, search is based on the RegEx provided.	**Match Case on Names and Values** – when checked, capitalization provided in the search field for an object must exactly match the name or value. **Include Inherited Values** – when checked, inherited values are also searched. **Exclude values** – when checked, values are not searched. **Regular Expression** – when checked, search is based on the RegEx provided. **Include Data Containers** – when checked, values in data containers are searched.

- **Empty Recycle Bin** attempts to permanently delete all objects flagged with 'Not in Use' in this recycle bin. Workspace revisable objects are flagged as 'in Use' when Approve Deletion is required, or events / references exist for the object. The 'in Use' setting prevents the object from being removed. Resolve the reported errors or consider the Force Empty Recycle Bin option for test systems, as defined below.

On the Confirm Purge dialog, the **Skip Analysis** button is enabled while counting the number of objects in the recycle bin. Review the object counts and click **Purge** to delete them or click **Cancel** to close without changing the recycle bin.

- **Empty Recycle Bin Before** permanently deletes only contents deleted before the specified date and time. For workspace revisable objects, approval of the deletion is required before removal is allowed.

   On the Empty Recycle Bin Options dialog, click the ellipsis button (...) to display the Date Picker and set the date and time. Click **OK** to close each dialog and perform the purge.

On the Confirm Purge dialog, the **Skip Analysis** button is enabled while counting the number of objects in the recycle bin. Review the object counts and click **Purge** to delete them or click **Cancel** to close without changing the recycle bin.

- **Force Empty Recycle Bin** is not recommended for production data since it ignores deletion approvals, events, and references and purges objects with an 'in Use' status. This option is intended to remove test data with fewer steps required when ignoring dependencies is not an issue.

- **Schedule Empty Recycle Bin** allows scheduling recycle bin maintenance, as defined in the **Schedule Empty Recycle Bin** topic.

- **Approve Deletion Recursively** attempts to remove the selected object **and its children** from the Approved workspace, generates a DELETEAPPROVAL event for the objects, and attempts to run the Approve Deletion action. This option is valid only for workspace revisable objects (those that allow approval) that are flagged as 'in Use.'

  If the Approve Deletion Recursively BGP cannot be completed successfully (for example, due to existing references), the Force Approve Deletion button is displayed in the Approve Deletion BGP execution report. The Force Approve Deletion button deletes and approves deletion of objects identified in the execution report with the 'Approve error report' text. A DELETEAPPROVAL event is generated for the deleted referenced objects.

> **Important:** The 'Force Approve Deletion' button can affect live objects in the Approved workspace since references may be removed to allow the deletion and approval to succeed.

Individual object actions

To address one or more selected objects in the Tree Recycle Bin, right-click the object(s) and choose one of the options described below. The options available vary based on the object selected.

> **Note:** If relevant, use group actions as defined in the previous section since they perform better than individual object actions.

- **Purge** permanently deletes the object if flagged with 'Not in Use' in this recycle bin, with no subsequent option for revival. Workspace revisable objects are flagged as 'in Use' when Approve Deletion is required, or events / references exist for the object. The 'in Use' setting prevents the object from being removed. The number of warnings reported are limited to 100 of each type with a summary of errors at the end of the background process, but that number can be changed via the case-sensitive `Purge.MaxNumberOfWarnings` property. To remove objects from the Recycle Bin on a schedule, refer to the **Schedule Empty Recycle Bin** topic.

- **Force Delete & Purge** removes an object regardless of deletion approvals, events, and references. Using this option without first approving the deletion does NOT generate a DELETEAPPROVAL event. If deletion events are required for downstream systems, first approve the deletion (defined below) and then purge the object (defined above). For more information on events, refer to **Events** in the **System Setup** documentation. A similar version of this option that excludes the recycle bin is available from the Maintain Menu, as defined in the **Maintain Menu** topic.

  If the Recycle Bin and Object Purge BGP ends with errors, the Force Purge button is displayed in the Result flipper on the BGP execution report. The Force Purge button deletes references to objects being deleted and they are not restored if the object is revived.

- **Approve Deletion** removes the selected object from the Approved workspace and generates a DELETEAPPROVAL event for the object. For workspace revisable objects only (those that allow approval), objects are flagged with 'In Use' if they are in the Approved workspace and 'Not In Use' when they have not been approved. For more information, refer to the **In Use and Not In Use Objects** section in the **Approval of Objects** topic of the **Getting Started** documentation.

- **Approve Deletion Recursively** attempts to remove the selected object **and its children** from the Approved workspace, generates a DELETEAPPROVAL event for the objects, and attempts to run the Approve Deletion action. This option is valid only for workspace revisable objects (those that allow approval) that are flagged as 'in Use.'

  If the Approve Deletion Recursively BGP cannot be completed successfully (for example, due to existing references), the Force Approve Deletion button is displayed in the Result flipper of the BGP execution report. The Force Approve Deletion button deletes and approves deletion of objects identified in the execution report with the 'Approve error report' text. A DELETEAPPROVAL event is generated for the deleted referenced objects.

> **Important:** The 'Force Approve Deletion' button can affect live objects in the Approved workspace since references may be removed to allow the deletion and approval to succeed.

- **Revive** restores the selected object, and based on dependencies, returns it to the location in the Tree from which it was deleted. Objects are not always revived exactly as they were prior to deletion, for example, if an object had references to other objects which have subsequently been deleted, those references are not present upon revival.

  When a reference for an approved object is deleted from the main workspace, the reference metadata is retained (although not displayed). This enables the metadata to be revived when that reference is revived from the Tree recycle bin or when the same reference type is recreated. For example, a reference is deleted

from an approved object but not purged from the recycle bin. Subsequently, a reference with the same source and target is created via an import. Since this 'new' reference for the object matches the deleted one, it is actually revived from the recycle bin. In this example, the previously deleted reference and its metadata attribute values are restored.

In rare cases where an object is revived but its previous parent has been purged, a temporary parent folder is added to the Tree with the expectation that a user will change the parent folder to a more appropriate location in the active hierarchy.

- **Revive Recursively** restores the selected object, and based on dependencies, returns it **and all child objects** to their previous location in the Tree tab. Objects are not always revived exactly as they were prior to deletion, for example, if an object had references to other objects which have subsequently been deleted, those references are not present upon revival.

  When a reference for an approved object is deleted from the main workspace, the reference metadata is retained (although not displayed). This enables the metadata to be revived when that reference is revived from the Tree recycle bin or when the same reference type is recreated. For example, a reference is deleted from an approved object but not purged from the recycle bin. Subsequently, a reference with the same source and target is created via an import. Since this 'new' reference for the object matches the deleted one, it is actually revived from the recycle bin. In this example, the previously deleted reference and its metadata attribute values are restored.

Schedule Empty Recycle Bin

Objects within the Tree Recycle Bin can be automatically deleted and/or purged on a scheduled basis by using the 'Schedule Empty Recycle Bin' feature. Recycle Bin emptying scheduling is similar to scheduling other processes in STEP (e.g., data imports, data exports, and bulk updates). The ability to schedule Recycle Bin emptying at designated times (e.g., overnight) frees users from time-consuming, manual tasks to empty the Recycle Bin, and allows the Recycle Bin to be regularly emptied with minimal or no user intervention.

The recommendation is to schedule emptying the recycle bin at least monthly and to include all contexts in use. The 'Data cleanup tools' healthcheck (defined in the **Healthcheck Test Index** topic of the **Administration Portal** documentation) identifies when no schedule exists for emptying the recycle bin, or if the schedule is not as recommended.

> **Note:** Scheduling is not available for the System Setup Recycle Bin since large numbers of objects are not generally deleted routinely from System Setup. For more information on the System Setup Recycle Bin, refer to the **Recycle Bin for System Setup** topic in **System Setup** documentation.

Configuration

To set a schedule for emptying the Tree Recycle Bin:

1. Right-click the Recycle Bin in Tree and select **Schedule Empty Recycle Bin** to display the Schedule Empty Recycle Bin wizard.

2. On the Delete Options step, set the following parameters:

- **Delete objects after __ days in the Recycle Bin:** Enter the number of days that an object must be in the Recycle Bin before it is deleted. The default retention time value is 7. This means that process will only remove objects from the Recycle Bin that have been approve deleted for at least 7 days or whatever you have set the retention time to be.

  Refer to the next bullet for additional **Approve Deletion** considerations.

- **Approve Deletion:** Select this option to remove objects and their children from the Approved workspace, which sends a DELETEAPPROVAL event.

  Considerations

  ○ The 'Approve Deletion' parameter is not affected by the value provided in the 'Delete objects after __ days...' parameter. As a result, when the Schedule Empty Recycle Bin operation runs, if 'Approve Deletion' is selected, all objects in the Recycle Bin are removed from the Approved workspace, even if they have not been in the Recycle Bin for the specified number of days.

  ○ When an object is removed from the Approved workspace via 'Approve Deletion,' a DELETEAPPROVAL event is generated for that object. However, if the object is subsequently purged from the Recycle Bin as part of the same Schedule Empty Recycle Bin operation, the event is also deleted, since the object that the event is related to no longer exists in the system.

    Therefore, if an event-based OIEP is set up to be triggered on DELETEAPPROVAL events, it is recommended to schedule this OIEP to start at more frequent intervals than the Schedule Empty Recycle Bin process, since the DELETEAPPROVAL event may disappear before the OIEP is invoked. For example, schedule the OIEP to start every minute and configure the Schedule Empty Recycle Bin process to run once a week.

- **Force Purge:** Select this option to attempt to forcefully delete objects from the Recycle Bin that cannot be deleted via the standard Empty Recycle Bin operation. For example, with this option, objects in the Approved workspace can potentially be force purged from the Recycle Bin without having first been removed from the Approved workspace through Approve Deletion.

> **Note:** To use the Force Purge option, the user who configures the Schedule Empty Recycle Bin process must have the 'Force Delete and Purge' setup action included in their user privileges. For more information, refer to the **Setup Actions and Error Descriptions** topic in the **System Setup** documentation.

- Click the **Next** button.

3. On the Select Contexts step, move the contexts from which to delete objects to the Selected list. It is recommended to include all contexts to ensure complete deletion of data. Click the **Next** button.

> **Note:** In the rare instance that additional workspaces other than Main and Approved exist on your STEP instance, this step is named 'Select Workspace and Context' and a list of additional workspaces is displayed at the top of the wizard screen. Click the checkbox next to each workspace that you want to select.

4. On the Scheduled Execution step, determine when and how often to empty the Recycle Bin. Click the **Next** button.

5. On the Name Process step, name the batch process for easy identification, and click the **Finish** button to complete the setup.

Scheduled Empty Recycle Bin processes are stored on the BG Processes tab (using the batch process name defined) under the Scheduled Processes node within Queued Processes. They display a status of 'waiting' and can be edited by clicking the 'Edit' button in the Status row.

Example

This is one example of how Schedule Empty Recycle Bin works:

You have an object that has been sitting in the Recycle Bin for the default 7 days, but you have not approve deleted the item and you run 'Schedule Empty Recycle Bin' now with retention time of 1 day. The object will first be approve deleted, but it will not be removed from the Recycle Bin since it has only just now been approve deleted. If you then run 'Schedule Empty Recycle Bin' after, for example, 2 days, then that object will be removed from the Recycle Bin if it is 'Not in Use' and if last edit date is more than one day in the past. You can locate that info for an object as shown below:

20882-012 AA Battery rev.0.1 Deleted (Not in Use)

| Images & Documents | Commercial | Tables | Proof View | Status | Log | State Log | Tasks |

| Product | Data Containers | Sub Products | References |

Description

Name	>	>	Value	>
> ID			149309	
> Name			20882-012 AA Battery	
> Object Type			Sales Item	
> Revision			0.1 Last edited by USER9 on Mon Nov 16 16:59:11 EST 2020	
> Approved			✖ Never Been Approved	
> Translation			Not Translated	
> Path			Primary Product Hierarchy/Products/Electronics/Electronic Accessories/Power/...	

Navigating and Searching

This section describes the many different ways you can access specific data in the workbench. STEP Workbench offers rich functionality for finding both System Setup and Tree objects based on various criteria. Whether it be by standard navigation, Bookmarks, searches using basic, advanced, or drill-down functionality, STEP provides many ways to locate the required data.

This section will allow users to:

- Navigate hierarchies
- Find data quickly using the **Goto** function
- Find data using basic and advanced searches
- Perform drill-down searches using the **Search Result Profiling** page
- Use standard and **Search Bookmarks**

> **Note:** Objects within the Recycle Bin are not searched and will not display in search results.

For information on search functionality in the Web UI, refer to the **Homepage Widgets** topic and the **Advanced Search** topic in the **Web User Interfaces** documentation.

Navigation

You can navigate the STEP tree structures in the same manner as you navigate Windows folder structures. Basic desktop computer skills are prerequisites for all users of the STEP system.

Expanding a Folder

Use one of the following methods to display the contents of a folder:

- Click the plus sign (+) to the left of a folder
- Double-click a collapsed folder

Collapsing a Folder

Use one of the following methods to hide the contents of a folder:

- Click the minus sign (-) to the left of a folder
- Double-click on an expanded folder

Collapse Tree

When folders in the Tree hierarchy are expanded, all can be collapsed by using the 'Collapse Tree' option from the 'View' menu.

Note: Folders too many sub nodes display an (x) and cannot be expanded in the hierarchy. To view objects beneath such folders, use the search or Goto functionality. For more information, refer to the **Goto** topic.

Navigating and expanding folders and sub folders can be done in any tab. However, when in the Workflow tab, first open a flipper to display the processes.

STEP Workflow

Tasks	Profile

Asset Update(2)

Start	1
Update	0
End	0

- Business_Action
- Clerical Review 2
- Conditionally Mandatory WF
- Contact Workflow
- Contract Agreements
- Contract Agreements(2)
- Customer Web UI Workflow
- Item Creation
- Lead Pipe Plumbing Check
- Order Process
- Product Awaiting Asset
- Publications
- Publication Sections
- Remove_object_from_Workflow
- Workflow with Deadlines

Tree
Search
BG Processes
System Setup
Bookmarks
STEP Workflow

Goto

The **Goto** functionality allows the user to locate an object in STEP in a quick and efficient manner. There are two 'Goto' features:

- **Goto** - A quick way to jump to a particular object in the database based on the name and/or ID. If there are multiple results, it displays the first one. Press 'Ctrl+G' to move the cursor to the Goto parameter.
- **Goto Next** - When there are multiple results from the 'Goto' function, the user can opt to select Goto Next to continue on to the next result. Press 'Ctrl+E' to display the next Goto Next item.

Type in the **Name** or **ID** of an object in the **Goto** field, press Enter or click the **Goto next object** button to the right of the field, and the system will take you to the object without displaying a list of search results.

Once you start typing in the **Goto** field, the system will suggest objects matching the typed-in text (case insensitive) and display them on a dropdown menu as shown below.

When typing in the 'Goto' field all objects are searched not just products. This includes but is not limited to classifications, assets, attributes, user names, etc.

It is important to keep in mind that:

- Object IDs and Names are both searched.
- Object IDs are searched case-sensitive.
- Object Names are searched case-insensitive.
- Wild Cards are not allowed

Items can be selected from the menu using either the mouse or the keyboard up arrow and down arrow keys. A maximum of 20 items will be displayed.

Another way to find the Goto and Goto Next options is in the Navigate menu.

Keys in the Goto function dropdown

The ID/Name dropdown list in Goto function will have any created keys as part of the dropdown list.

Note: Only activated keys can be found in the Goto function dropdown list. Refer to the **Creating and Deleting Keys** topic in the **Data Quality** documentation.

Selecting a key from this dropdown can be used to identify and delete objects, parents, referenced objects, and assets. The system will take the user to the product that has the unique key value stored on that object.

Setting the Primary Hierarchy for 'Goto' searches

A user can set the Primary Hierarchy to be either a Primary Product Hierarchy, Classification folder, Asset Folder, etc, through the View > Primary Hierarchy Menu. Once the primary hierarchy is selected and an object is searched, first priority is given to the folder that is selected and then the other folders will be searched.

For example, if the View > Primary Hierarchy is set to Assets, the product will first be searched under Assets. Then when clicked on Search again, the user will be shown in the actual hierarchy where the product was initially created. In normal circumstances, the product will by default be searched in the actual hierarchy where it was initially created.

Important: Objects within the Recycle Bin are not searched as part of the Goto functionality.

Bookmarks

Bookmarks are placeholders created by the user that serves as a shortcut for previously viewed objects.

The following types of bookmarks exist:

1. Standard Navigation **Bookmarks**
2. **Search Bookmarks**.

> **Note:** Bookmarks are stored on the local STEP system and are not accessible when logging into STEP from a different computer.

Standard Navigation Bookmarks

Standard navigation bookmarks are used for quickly accessing specific nodes in the Tree and System Setup hierarchies.

You can add a standard navigation bookmark by selecting a node in the hierarchy and clicking **Add Bookmark** in the **Navigate: Bookmarks** menu or alternately by using the Ctrl+D keyboard shortcut. The bookmark will afterward be accessible in the left side Bookmarks tab.

Search Bookmarks

Search Bookmarks are used for storing specific searches that can then easily be re-run.

Steps to add a Search Bookmark:

1. Create a search criteria in the Search tab.

2. Go to Navigate > Bookmarks
3. Select 'Add Search Bookmark'

4. A dialog will be displayed to type in the bookmark name.

5. Click on OK button.

Accessing the Saved Search Bookmark

When you click on a stored search bookmark, the search parameters will be populated. Select Search to rerun the search.

Note: Search bookmarks are saved under the Bookmarks tab with a search icon labeled with the bookmark name provided by the user.

Saved bookmarks can also be found in the under the Navigate > Bookmarks.

Editing a Bookmark

Both standard navigation and Search Bookmarks can be edited in the Bookmarks tab by right-clicking the bookmark and selecting **Edit Bookmark** in the context menu. It is possible to edit the name of the bookmark and also the object / search URL if the **Edit URL** checkbox is activated.

Removing a Bookmark

Both standard navigation and Search Bookmarks can be removed from the Bookmarks tab by right-clicking the Bookmark in the tab and selecting **Remove Bookmark** on the context menu.

Search

The **Search** tab, in combination with the **Search Result Profiling** page, offers extensive methods for locating objects in STEP quickly and efficiently.

Generally, there are two approaches to performing searches:

1. If you know specific details about the object to find, use the **Search** tab. For example, all products where the value for the attribute 'Weight' is less than '5 kg', the object is located below the product folder 'Office Chairs' and is not of the object type 'Item'.
2. If you do not know details, start with a broad search and then narrow it down using the **Search Result Profiling**.

> **Note:** Objects in the Recycle Bin are not searched and will not display in search results.

Search Elements

The elements on the Search tab work together to create and refine a search for objects in STEP. The numbered elements in the following image are described below.

1. Search criteria type selector - Click the text to display a list of available search criteria options. Refer to the **Search Functionality** topic for more information.

2. Add criteria / operator button - Click the green plus button (➕) to add a new search criterion or hover the mouse over and hold down the green plus button (➕) to display a sub menu and choose an **OR** operator or an **Exclude** operator. Refer to the **Search Functionality** topic for more information.

3. Remove search criteria button - The X button clears an individual criteria from the search. Click the Search button to refresh the Results Area.

4. Reset button - Clears all results and search criteria from the Search panel and Search Result Profiling page.

5. Search button - Runs the defined search.

6. Search result counts - The number of items currently displayed and total number of items found by the search. If the search finds objects not visible in the current context or objects that you are not privileged to view, a message is displayed and the objects are not displayed in the search result.

7. Show Details / Hide Details toggle - Hyperlink shows or hides search result details. The details view displays asset thumbnails. The asset thumbnail is displayed when the search is under a classification folder and there are assets. Similarly, if the search is for the products and the product is linked to an asset, the thumbnail is displayed. If no image is linked, 'No Primary Image' is displayed.

8. Search results list - When a search has been executed, the results are shown in a list below the search box. Clicking one of the results will open the object editor for that particular object in the Search Results Profiling pane, while continuing to display the search results list. It is also possible multi-selection from this list and a maximum of 100 results are displayed. The complete result set can be viewed, exported, or updated using the 'Operations on Entire Result' options below.

> **Note:** The maximum results displayed can be adjusted via the case-sensitive 'DrillDownSearch.Maxresults' property in the sharedconfig.properties file. However, it is not advisable to adjust the number more than 100+ as this will diminish system performance as the number increases.

9. Save as Collection button - Click to open the 'Save as Collection' dialog and save the entire result set as a collection. Collections are available on the Tree. Refer to the **Search Operations on Entire Result** topic for more information.

10. Export button - Click to open the Export Manager wizard and export the entire result set to a specified file type. Refer to the **Search Operations on Entire Result** topic for more information.

11. Bulk Update button - Click to open the Bulk Update wizard and modify a variety of elements on each item for the entire result set. Refer to the **Search Operations on Entire Result** topic for more information.

12. Search Result Profiling - Panel displays profiling information about the search including categories and provides a convenient way to further refine the search. Refer to the **Search Result Profiling** topic for more information.

Search Options

The Search tab dropdown includes a number of options. Each is described in greater detail in the topics that follow.

- Data Containers
- Document Content
- JavaScript Search

- Missing Mandatory Values
- Object Type
- Product Override Search
- Referenced Assets
- Referenced By
- References
- Revised Objects Changed Since
- Sample Result
- Search Below
- Search from List
- Search in Publication Hierarchy
- STEP Workflow
- Translation Status
- Unapproved
- Unpushed or Failed Assets

For information on performing optimal searches, refer to the **Scheduled Process Recommendations** topic in the **System Administration** documentation.

Search Functionality

This section describes the different types of search criteria available in the STEP system as well as some basic search functions.

> **Important:** Calculated attribute values are generated on-the-fly. Searching for the value of a calculated attribute is not allowed since generating all possible calculations would cause substantial performance issues.

Standard Search Criteria

The standard search criteria named 'Search' allows you to find objects based on name, ID, attributes and their values.

A text string entered in the search field will search for object names, IDs, or attribute values where the text occurs.

If you enter a text string and click the Search button, search finds objects with an ID, and/or a name and/or an attribute and/or their values matching the entered string. You can further refine standard searches as shown below.

> **Note:** By default, standard searches are case insensitive for name and attribute value searches, but are case sensitive for ID searches. You can make name and attribute value searches case sensitive using the Advanced option 'Match Case on Names and Values.' For more information on the options available under advanced, refer to the **Search: Advanced Options** topic.

Search Field Typeahead

Once you start typing in the standard search criteria text field, the system suggests possible entries matching the typed in text (case insensitive), and displays them on a dropdown menu as shown below.

In the typeahead menu, objects are displayed with their relevant icon, then name, and then ID in brackets. Attribute values are shown as text.

Items can be selected from the menu using either the mouse or the keyboard 'arrow up' and 'arrow down' keys. A maximum of 100 items will be displayed.

> **Note:** Using sharedconfig.properties entries, it is possible for a system administrator to control the behavior of the typeahead. E.g., after how many entered characters should suggestions be shown, etc. Search for the 'TypeAhead' section on the Configuration tab. For more information, refer to the **Configuration** topic in the **Administration Portal** documentation.

Limiting Results to Matches on IDs

You can limit standard searches to match on ID only by entering 'ID = ' at the beginning of the text field as shown below.

'id' and 'Id' will also work, as the spaces on each side of the equals sign are optional.

Limiting Results to Matches on Name

You can limit standard searches to match only on name by entering "Name = " at the beginning of the text field as shown below.

"name" and "NAME" will also work since the spaces on each side of the equals sign are optional.

Attribute Value Searches

Using a standard search, you can limit the result to only match on values for specific Attributes.

> **Important:** Calculated attribute values cannot be searched since they are generated only when viewed or processed.

There are at least three ways to construct an attribute search query:

1. Start entering an attribute name or ID, then select the relevant attribute from the typeahead menu, after which "Attribute Name (Attribute ID)" is inserted in the text field, then enter a search operator or enter a SPACE and select an operator from the typeahead menu and enter the value to search for.

2. Enter the attribute ID (case sensitive), enter a search operator or enter a SPACE and select an operator from the typeahead menu, then enter the value to search for.

3. Enter the attribute name (case insensitive), enter a search operator or enter a SPACE and select an operator from the typeahead menu, then enter the value to search for.

Note: As shown on the screenshot above, if you have the required privileges you will get typeahead suggestions on existing values after having specified a search operator.

Attribute Value Search Operators

The following search operators that can be used when performing attribute value and reference metadata attribute value searches.

Operator	Description
<	Less than operator. Only works for number validated attributes (Validation Base Type = number, integer or fraction)
<=	Less than or equal to operator. Only works for number validated attributes (Validation Base Type = number, integer or fraction)

Operator	Description
=	Equal to operator.
>	Greater than operator. Only works for number validated attributes (Validation Base Type = number, integer or fraction)
>=	Greater than or equal to operator. Only works for number validated attributes (Validation Base Type = number, integer or fraction)
!	Operator used for finding objects where the specified attribute does not have values in current context. Note that the search does not check whether the attribute is valid for a given object. Also, if the specified attribute has an inherited value (not a local value), then the object will be listed in the results set even though the value field is not empty. **Note:** This operator does not perform searches on missing reference metadata attribute values.
!!	Operator used for finding objects where the specified attribute does not have local values in any context. Note that the search does not check whether the attribute is valid for a given object. Also, if the specified attribute has an inherited value (not a local value), then the object will be listed in the results set even though the value field is not empty. **Note:** This operator does not perform searches on missing reference metadata attribute values.

Wildcards in Searches

Two following two wildcards are available for performing searches on partial text strings:

- * (asterisk), multi-character, represents any number of characters in a string
- ? (question mark), single character, represents exactly one character

Wildcards can be used anywhere in the text string.

Note: Searches starting with a wildcard should be avoided since they are significantly slower than other searches.

Searches in 'Full Text Indexable' Attribute Values

Searches in values for attributes configured with the 'Full Text Indexable' parameter set to 'Yes' do not work in the same manner as searches in other attribute values. Apart from common English words like 'in' and 'as,' each word is indexed as a separate element. For more information about the words that are not indexed, search the Oracle website for the 'English Default Stoplist.'

For example, consider an attribute named 'Description' that has the following value on a given product:

Black powder coated die-cast aluminum enclosure. Textured surface. Bulk version: Enclosures may possibly have flaws in the finish such as scratches, dents, discoloration, etc.

- If the 'Full Text Indexable' parameter is set to 'Yes' for the attribute, a search for 'Description = aluminum' returns the product.
- If the 'Full Text Indexable' parameter is set to 'No' for the attribute, a search to find this product would require a wildcard on both sides of the 'aluminum' text like this: 'Description = *aluminum*'.

Note: Searches starting with a wildcard (as shown above) are significantly slower than other searches.

By default, if you have not specified an attribute, typeahead for Full Text Indexed attribute value entries is turned off. If you have specified an attribute, you will first get typeahead suggestions after having entered three (3) characters of the value entry. Refer to the 'Search Field Typeahead' section above.

While changing this setting is allowed on an existing attribute, it does required special handling. For Oracle databases, this action requires single-update mode (SUM), as defined in the **Single-Update Mode** topic. For Cassandra databases, this action uses Lock-free Schema Change (LFSC) functionality, as defined in the **Lock-free Schema Change** topic.

Numeric Value Searches for Attributes with Units

Values for numeric searches with no units are assumed supplied in the default unit for the attribute. For example, if kg is the default unit for the 'Weight' attribute, 'Weight = 1' will match '1 kg' and '1000 g'. If no default unit is configured, the search 'Weight = 1' will only match the value '1' with no unit.

ISO Date Searches

If an attribute with the validation type of 'ISO Date,' where the date populated in the field is in the YYYY-MM-DD format, a search on the populated attribute on objects can be performed using the following key words in the Search tab: now, today, tomorrow, yesterday.

While it does not matter if the 'ISO Date' is set to 'Strict Validation' or not, it does matter that the date is written in the YYYY-MM-DD format. Any other format, including using slashes ' / ' instead of dashes '-' will not work since searches work by matching only values conforming to the ISO standard (with dashes). For this reason, it is recommended that 'Strict Validation' be set to Yes, otherwise, the stored values are not guaranteed to be searchable.

In the example below, a user searched for an object that has a particular date. The user typed in the name of the date attribute 'ISO Date', and then used an 'attribute value search operation' followed by the keyword 'tomorrow.' Then they narrowed their search even further to just under one particular node, giving them the desired results.

Combining Search Criteria

You can combine different search criteria to create advanced searches. Except for cases where one or more 'OR' operators are used, the sequence of the criteria does not matter.

The search shown below:

generates the same results as the following search:

When not using 'OR' operators or 'Exclude' search criteria, all criteria are combined with an implicit 'AND' operator.

Click the add criteria button () to construct a query that includes more than one criteria. By default, the criteria will be 'AND,' meaning that all criteria will be met for the results.

As an example, the search shown below will find objects that have the value 'Black' for the 'Color' attribute AND that are present below an 'Audio Visual Equipment' hierarchy node. The order of criteria does not impact the results.

For information on constructing your search using 'Exclude' search criteria and 'OR' operators, refer to the section below.

Using 'Exclude' Search Criteria

It is possible to negate all the different types of search criteria using the 'Exclude' search criteria functionality.

You can add 'Exclude' search criteria to search either by clicking and holding the add criteria button (), then selecting 'Add Exclude' from the menu that displays (shown below). Criteria can also be excluded by clicking an 'exclude' link on the generated 'Search Result Profiling' panel.

'Exclude' search criteria appear with a red minus icon on the left side of the criteria panel (shown below).

When no 'OR' operators are used, the sequence of 'Exclude' search criteria does not affect the results.

Continuing with the example above, the search finds objects where all the 'positive' criteria are met, minus objects where the attribute 'Color' is 'Gray.'

> **Note:** Use as many 'Exclude' search criteria as needed. Keep in mind that the 'Exclude' criteria are subtracted from the 'positive' search results, so a search containing only an 'Exclude' search criteria without an 'Include' criteria as point of departure will not generate any results.

Using the 'OR' Operator

Add an 'OR' operator to search by clicking and holding the add criteria button ( ), then selecting 'Add OR' from the menu that displays (shown below).

When using 'OR' operators, search is divided into separate parts containing one or more criteria. Each part is, in effect, executed separately and the results are then added before presenting the final result.

As it is not possible to work with parenthesis, when working with 'OR' operators it is often necessary to configure the same criterion on both sides of an 'OR' operator. As an example, the search shown below will return all objects where the name starts with the text 'Hat123' and the color is 'Black,' plus all objects where the name starts with the text 'Hat123' and the color is 'Gray.'

Search Result Profiling

After performing a search, the **Search Result Profiling** panel displays statistics about the search grouped under the headers **Results by Object Type**, **Results by Position in Tree Hierarchy**, and **Results by Value.**

Displaying profiling statistics is controlled by the `DrillDownSearch.GetStatistics` property. The property is set to 'true' by default, which allows result profiling to display automatically. When the property is set to 'false', the right-hand panel of the Search tab is empty regardless of the search performed.

Apart from displaying information about the results of your search, you can use the panel to further refine your search. For example, if you start by running a broad search, you can refine it by clicking the links 'Exclude' in the profile - thereby adding additional criteria to your search. Refer to the example below:

For all types of searches, the **Search Result Profiling** panel displays the results sorted by **Object Type**. The screenshot above shows the **Results by Object Type**. The search result includes 78 **Products** of the **Object Type** 'Product', 8 **Assets** (where 7 are of the **Object Type** 'TIFF Image' and 1 is of the **Object Type** 'JPG Image') and finally 1 **Attribute**.

If you click **TIFF Image**, an **Object Type Search Criteria** is added to the search. The search runs again, finding only objects with the **Object Type** 'TIFF Image.'

When an exclude option is selected, an additional search criteria called 'Add Exclude' is added as shown below:

If you click **exclude** next to **TIFF Image**, an **Object Type Search Criteria** is added to the search, but this time as an **Exclude Criteria**. Hence, all objects of the **Object Type** 'TIFF Image' will be excluded from the search result.

Search: Advanced Options

Additional options for narrowing a search can be accessed under the **Advanced** flipper in Search.

Each of the following advanced options is described in the following sections:

1. Match Case on Names and Values
2. Include Inherited Values
3. Exclude Values
4. Regular Expression
5. Include Data Containers

1. **Match Case on Names and Values** - When selected, **Name** and **Attribute** value searches are not case sensitive.

   For example, this is a basic search with search criteria of 'Search = T-Shirt.'

The search results are displayed with all the objects in STEP that match the search criteria, in this case 'T-shirt.'

STEP objects in the search result includes:

- Classification / Asset / Product / Entity objects
- Special Types objects
- System Setup Tab objects

Now, on the search, select the Advanced option 'Match Case on Names and Values.'

With this option selected, the search result will only include attribute values and all the object names in STEP that match the search criteria in the correct case. Since the previous search results were all a different case, this search will return no results.

Note: **ID** searches are always case sensitive.

2. **Include Inherited Values** -When selected, attribute value search results will show objects where the match includes inherited values as well as objects where the match includes locally defined values.

Attribute values with hierarchical inheritance (values with green triangle) will only be included in the search result when Include Inherited Values option is selected.

Dimension dependent Attributes – Specification or Description attribute values inheriting from other contexts (values with a red triangle) will also be displayed in the search result even when the user does not select the option Include Inherited values.

3. **Exclude Values** - When selected, attribute values are not searched for the entered search term. If unchecked, attribute values are searched for the entered term and objects with the search term populated as an attribute value are included in the search results.

The Exclude values in advanced search are useful for neglecting objects which are having search content as a value in it.

For example, assume there are attributes which has value 'Red' in few objects and there are objects which has Object Name/ID as 'Red.'

If a normal search is performed, the results for 'Red' are shown below.

If the same search is performed but with 'Exclude Values' selected under Advanced, only attribute IDs and Names matching the search are turned.

4. **Regular Expression** - When selected, attribute values are searched using the regular expression entered in the Search text box. Although establishing an attribute with Validation Base Type of Regular Expression allows more than 2000 characters (for example, [A-Z]{1,3000}), searching via a Regular Expression only returns results for matches within the first 2000 characters. For more information, refer to the **Regular Expression** topic in **Resource Materials** online help.

5. **Include Data Containers** - Include any search terms contained inside data containers.

Search Operations on Entire Result

These operations are found at the bottom of the **Search** Tab.

Language-dependent searches and exports

When exporting search results or exporting a collection made from search results, the context selected when performing the search is used in the 'Displaying # of # results' list of objects found and the Export Manager Advanced tab Context field determines which values are exported.

If a search or a collection from a search is based on a language-dependent attribute's Name, the export file is blank if the context selected in the Export Manager does not match the context selected during the search or collection creation.

To export objects with their relevant language-dependent attribute values regardless of the context in use during search or collection creation, use the Search from List criterion using the ID option from the dropdown (as defined in the **Search: Search from List** topic) and paste in a list of the object IDs to search on and export. Or, perform the search only on the attribute ID along with a wildcard (*) for the attribute value.

Save as Collection

After conducting a search, you can save the search result as a collection.

Click the **Save as Collection** button ( ) and specify the location, ID, and Name, of the new collection. For more information on collections, refer to the **Collection** topic in the **Getting Started** documentation.

Export

After conducting a search, you can export the search result by clicking the **Export** button () at the bottom of the Search tab.

On the Select Objects step of the Export Manager, all the objects in the search result are considered. The objects exported are determined by the selected export format and the other selections made in the Export Manger.

For more information on using the Export Manager, refer to the **Export Manager** topic in the **Data Exchange** documentation.

Bulk Update

After running a search you can perform a Bulk Update on the entire search result.

Click the **Bulk Update** button () to display the Bulk Update wizard. The search result is set as the dataset.

For more information on bulk updates, refer to the **Bulk Updates** documentation.

Note: To **Bulk Update** only some of the objects in the result, select or multi select in the search result and then click the **Run Bulk Update** option on the **File** menu.

Search: Data Containers

The Data Containers search criterion allows users to limit search results to only objects for which data containers exist for the specific data container types, or those objects for which specific attributes are linked via data containers.

Searching for objects with information in data containers is available using the standard search criterion and also using the specific Data Containers criterion. Each method is defined below.

For more information on data containers and the terminology used in this topic, refer to the **Data Containers** topic of the **System Setup** documentation.

Standard Search Including Data Containers

This option searches data containers and other identified objects for the defined values. For more information, refer to the **Examples** section below.

1. Click the **Search** tab, and select Search from the dropdown.

2. Open the 'Advanced' flipper and check the 'Include Data Containers' option.

3. If needed, click the green plus button (![plus]) to add additional search criteria.

4. Click on **Search** to run the search and view results.

Data Containers Only Search

This method requires that the searched data exist in a data container. Matching data outside of data containers is not displayed. For more information, refer to the **Examples** section below.

1. Click the **Search** tab, and click the Search dropdown.

2. In the **Search Criteria Type Selector**, select the 'Data Containers' search criterion.

3. Supply the Data Container Type parameter and the additional text input parameter as needed:
   ◦ Continue to the next step without populating either parameter to return all objects for which any data container of any data container type that has been added.

○ Click the ellipsis button (**...**) for the Data Container Type parameter to limit the search results to only those objects for the selected data container type. Click **Select** and then click **Search**. The search returns a list of objects for which the data container type has been added, even when no attribute values exist in the data container. For more information, refer to the **Examples** section below.

○ If necessary, narrow the search using additional search terms in the text input parameter. Type the selected 'Data Container' attribute to display typeahead suggestions. Once selected, the available operators =, <, >, <=, >=, !, !! are displayed. If the selected attribute has a value in the 'Data Container' tab, the values display as a dropdown. However, the search result will be displayed only for the attribute value which is present for the attribute in the Data Container tab. For more information, refer to the **Examples** section below.

4. If necessary, open the Data Containers Advanced flipper and set the following parameters:

- **Instance count** - specify a number of data container instances an object must have.
- **Match Case on Values** - makes the search case sensitive.
- **Regular Expression** - search data containers using a regular expression. For more information, refer to the **Regular Expression** topic in **Resource Materials** online help.

5. If needed, click the green plus button ( ) to add additional search criteria.

6. Click on **Search** to run the search and view results.

Examples

The following examples show a variety of searches for values in data containers.

Standard Search for Product Data Container Value

The dataset includes an object with a Flat Crush Test value of '10 kN'. This value is in a product data container.

Searching for the value '10 kN' with the standard Search criterion returns 0 results.

Checking the Advanced option to 'Include Data Containers', and searching again, displays the object as a result.

Standard Search for Entity Data Container Value

In this example, a user searches for all instances of the value 'BAHAMAS' in STEP. Select the standard 'Search' from the dropdown, add 'BAHAMAS' into the text input parameter, open the advanced flipper and check the 'Include Data Containers' option, and click Search. The results includes Customer A and Customer B entity objects where 'BAHAMAS' occurs inside a data container, and also includes the 'BAHAMAS' values that appear outside of data containers.

Data Container search for Entity Data Container Type

In the example below, a user searches for a data container type called 'Shipping Address' without refining the search any further. If the user selects 'Shipping Address' as the Data Container Type and clicks Search, a list of entities for which a data container has been added to an entity under the data container type 'Shipping Address' will display. In this instance, four entities are listed.

The entity with the ID 'CUS_107835' has an attribute 'Country Code' with the value of 'ARGENTINA' in the Contact tab, but with the value of 'BAHAMAS' on the Data Containers tab.

When a search is performed on the 'Shipping Address' data container and the attribute 'Country Code' is selected, all of the values are displayed. The search result will display the entity 'Customer B' only if the value is 'BAHAMAS.' The search result will return '0' if the value selected is 'ARGENTINA'

Data Container search for Entity Data Container Type and Value

To continue the previous example, if the user refines the search for entities with a 'Country Code' data container type to only include those data containers containing the value 'BAHAMAS', the user would enter 'BAHAMAS' in the input field. In this example, results returned from the search show two of the original four entities. This means that a 'Shipping Address' data container has been added to these two entities, and an attribute within those data containers also contains the value 'BAHAMAS'.

Search: Document Content

With the **Document Content** search criteria you can search for a specified word / text string in text documents stored as Assets in STEP.

> **Important:** A prerequisite to searching in documents is that they are indexed. Document Content displays as a search option only in systems that have full text indexable functionality enabled and are not running In-Memory.

1. Click the **Search** tab and in the Search dropdown select **Document Content**.

2. Enter the word / text string into the text field that appears.

3. Click the green plus sign () to add additional search criteria. (Optional)

4. Click on 'Search' to run the search and view results.

Search: JavaScript Search

The **JavaScript** search criteria searches through all JavaScript in STEP. It can match items according to Business Rules, Match Algorithms, Decision Tables or any other structure programmed through JavaScript.

Follow the steps below to set up a JavaScript Search:

1. Click the Search tab and click the Search dropdown.

2. Select **JavaScript search**.

JavaScript Checkbox Options

These checkbox options are available with JavaScript search criteria:

- **Match Case**: If you select this, the search will only return results that match the upper or lower case letters that are in the search criteria.

- **Match whole word only**: will return only results that are the exact criteria that were put in that standalone. An example would be if the letter 'a' were typed into a search, and only results that had 'a' in it that standalone somewhere in the JavaScript were returned.

Search: Missing Mandatory Values

The Missing Mandatory Values search criteria is used for finding Product objects that have valid **Mandatory Specification** attributes without values.

To set a criteria as a **Missing Mandatory Values** search:

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Missing Mandatory Values** from the dropdown.

Use Cases

1. Product object which has specification and description attribute as mandatory with empty values.

   The 'Product Name' attribute is set as mandatory for Item Object Types. For Object 22200, the attribute value is left empty. In the Search tab, Missing Mandatory Values search criteria is used with Object Type 'ProductsRoot' search criteria. 22200 is included in the search results.

2. Description attribute is mandatory and is left blank on entity object.

    In this example, the 'Available Sizes' description attribute is set to mandatory. On the address entity ADD_ 107837, the 'Available Sizes' attribute is empty. A search is performed that has a 'Missing Mandatory Values' search criteria with Object Type 'Entity root' search criteria. The ADD_107837 object is returned as a result.

The search criteria requires no data input or selections to be made. However, it is encouraged to use in conjunction with another search criteria (by clicking the green + sign) to help further refine the search.

> **Note:** As the **Missing Mandatory Values** search criteria only works on Product objects, using it in combination with other search criteria will limit the search result to such objects.

The Missing Mandatory Values search criteria can also be set to exclude Product objects with missing **Mandatory** values. This functionality is described in **Using Exclude Search Criteria** within the **Search Functionality** topic.

Search: Object Type

With the **Object Type** search criteria you can limit your search result to items of a specific **Object Type**. These objects are maintained in the workbench System Setup > Object Types & Structures folder.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Object Type** from the dropdown.

3. In the dropdown that displays 'Product' by default, select an object type. Refer to the **System Setup Object Types** section below for more information.
   - Hover on an object type to display a sub menu when available.

   - When an **Other...** option is available, click it to display a selection dialog. Use the Browse or Search tab to select the object type. Click **Select** to confirm.

4. If needed, click the green plus button () to add additional search criteria. For example, return only products with the text 'ACME'.

> **Note:** Without the additional search criterion shown above, the results will be a list of all objects of the specified type.

5. Click **Search** to run the search and view results.

System Setup Object Types

The following object type selections require further information.

Attributes, Lists of Values, and Units

The Attribute, List of Values, and Unit object type categories do not include sub selections. All of the selected object types available will be searched for each of these categories.

Special Types

Special Types includes Table Type, Business Rule, Business Library, Business Condition, Business Action, and Business Function object types.

Search: Product Override Search

With the **Product Override** search criteria you can locate and identify any product overrides present in your system. You can search for all overrides in STEP or you can narrow your search to overrides of a specific product. If more concise results are required, you can specify sub-products.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Product Override Search** from the dropdown.

3. In the Overridden Product group, select a radio button :
   - **Find All** - Searches for all product overrides.
   - **Find by Overridden Product** - Searches for the specified product, as shown in this image. In the text box, either type the product's name, or click the ellipsis button (...) to browse or search for a product.

4. In the Sub Products group, set the following options as needed:
   ○ **Exact Match on Child Products** - When checked, search results must have every sub-product specified.
   ○ **Add Child Product** - Click the link to select sub products that will narrow the search further by requiring search results to have exactly the specified sub-products linked to them.

   Click the arrow button (>) on one or a group of rows to display the following menu and perform the action:

   ○ **Hide** - Hides an added child product from list.
   ○ **Show All Rows** - Show all hidden child products.
   ○ **Add Child Product** - Does the same operation as the 'Add Child Product' link as stated above.
   ○ **Remove sub product** - Removes the selected child product.

5. If needed, click the green plus button () to add additional search criteria.

6. Click on **Search** to run the search and view results.

This image shows products with the specified child product, but others child products could exist as well.

This image shows there are no overridden products with only this exact sub product.

This image shows overrides regardless of sub products.

Search: Referenced Assets

The Referenced Assets search criteria is used for finding product objects which has referenced assets to the specified product.

By default, all local referenced assets for the specified product are displayed.

To set up Referenced Assets search criteria:

1. Click on the **Search** tab and click the Search dropdown.
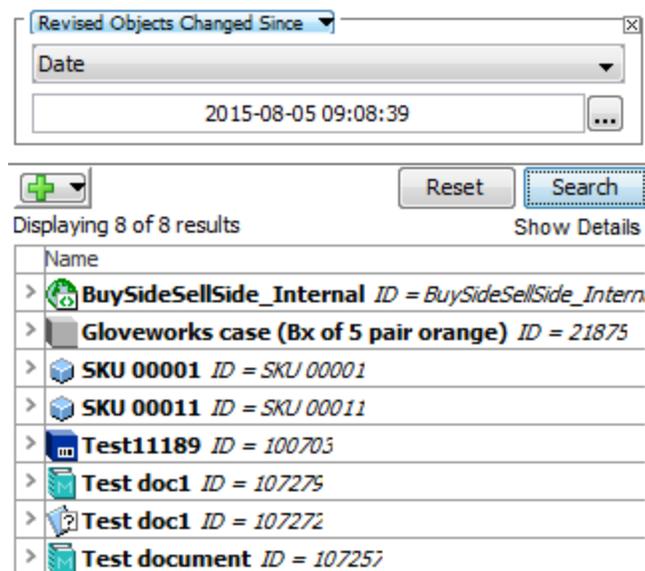

2. Select **Referenced Assets** from the dropdown.

3. Specify a Product Name in the input field by either tying in the actual product name or the product ID. By running a basic search, it will return results of all referenced assets of the product specified.

Note: If the product ID and name are the same, or if the product name has numbers as part of its name, the search result will still display all the local referenced assets of the product specified.

Checkboxes for Referenced Assets Search

When performing a search, there are two search checkbox options that can be selected.

- **Include Inherited Assets** - This option is used when the inherited referenced assets on the specified product are to be included in the search result.

- **Match Case on Names** - This ensures that the specified product name is searched matching the case (case sensitive) and all local referenced assets are displayed in the search result.

Search: References and Referenced By

The **References** and **Referenced By** criteria work similarly.

To navigate to either of these searches:

1. Click on the **Search** tab and click the Search dropdown.

2. Select **References** or **Referenced By** from the dropdown.

Both options require a reference type selection to begin. Reference types are setup in STEP Workbench System Setup tab in the Reference Types folder, and the Web UI Advanced Search allows you to pick from image and document reference types, classification reference types, and product reference types.

Once a reference type is entered, no additional options need to be filled in to start a search. Use the information at a high level or fill in the other values to drill down further (e.g., multi-supplier item references). Select a reference source under **Referenced By** and a target under the **References**. Plus enter specific attributes and values to search reference metadata.

References

For References, there are three boxes that can be checked: **Include Inherited References**, **Include Data Container References**, and **Finding Missing References**.

 Include Inherited References: When this is selected, it will show items that have the particular search criteria passed down to them from a parent folder or level.

Include Data Container References: When this is selected, references that appear on data containers may appear in the search results.

Finding Missing References: When the reference type is selected, and this box is checked, the populated results will show all items that have that particular missing reference.

Reference Target

The user has to type the ID/Name of the target in the 'Reference Target' field and click on the 'Search' button. This will display all the Source / Products which uses the Target reference specified in the 'Reference Target' search field.

In this example, the 'Reference Type' field is empty. Hence the result is irrespective of the reference type.

The search result will differ when we specify the 'Reference Type'.

In this example, the 'Reference Type' is selected and shows all the results for that 'Reference Target.'

Search

References

Reference Type   Product Images (ProductImage)   ...

☐ Include Inherited References

☐ Find Missing References

Reference Target

Search
image/jpeg

◉ Advanced

➕

Reference Metadata

➕

Reset   Search

Displaying 7 of 7 results   Show Details

Name

> 123857 G *ID = 123857*
> 0726222 *ID = 111204*
> Acme Automatic Drip Coffee Maker *ID = 22196*
> Cotton T-shirts *ID = 18209*
> Dog Party Hats Assortment *ID = 115306*
> Dog Party Hats Assortment *ID = 121190*
> Yellow & Pink Party Hat *ID = 121179*

Search Result Profiling

7 hit(s)
Click links to narrow down search

Results by Object Type

Product (7) - exclude

    Item (6) - exclude
    Item Family (1) - exclude

Results by Position in Tree Hierarchy

Results by Parent
(Displaying the 5 most common)

    Products (4) - exclude
    Flashlights Item Override → Flashlights Items (1) - exclude
    Dress Shoes (1) - exclude
    T-Shirts Family (1) - exclude
    Party Hats (1) - exclude

If a narrowed search is needed, use the advanced option. To use this option click the 'Advanced' flipper and select the appropriate option. For more details on the advanced options, refer to the **Search: Advanced Options** topic.

Search
image/jpeg

◉ Advanced

☐ Match Case on Names and Values

☐ Include Inherited Values

☐ Exclude values

☐ Regular Expression

☐ Include Data Containers

Referenced By

Reference Source

The user must type the ID / Name of the source to search. It will list the items which have been used as a source.

Click the ellipsis button (...) to browse for a reference type for search either type in the reference type ID / Name for more restricted search.

If the user needs a narrowed search, then the user can also use the advanced option. To use this option, open the Advanced flipper and select the appropriate. For more details on the advanced options, refer to the **Search: Advanced Options** topic.

References and Referenced By Metadata Attribute Value Searches

Values for metadata attributes may be searched by using the **References** or **Referenced By** search options. Users may indicate any value to search *all* metadata attributes for a matching value. The following pictures will demonstrate with **References**, but know that the same holds true for **Referenced By**.

Alternatively, users may enter an attribute *ID* or *name*, operator, and value for a more restricted search.

Note: It is not possible to perform searches on missing metadata values.

Search: Revised Objects Changed Since

With the **Revised Objects Changed Since** search criteria you can find recently edited objects in the workbench. To narrow your search, enter an exact date / time to determine how old the changes can be, or you use intervals of days, hours, or minutes. Revised Objects Changed Since criteria can be combined with any other search criteria.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Revised Objects Changed Since** from the dropdown.

3. A dropdown appears with the following options:
    - Date
    - Interval of Days
    - Interval of Hours
    - Intervals of Minutes

> **Note:** Only number values are accepted as input for the options **Interval in days, Interval in hours, Interval in minutes**. When Days/day, hour/Hours/H, or minutes/Min/M is suffixed along with number, the number value is considered.

For the purpose of this example, 'Date' will be used for the 'Revised Objects Changed Since' search field. The **Date** option will provide a data picker, allowing for the selection of the data and time.

4. Click the ellipsis button (...) and determine the date / time of the oldest objects to search. Click **OK**.

5. If necessary, click the green plus button ([+]) to define additional search criteria.

6. Click on **Search** to run the search and view results.

- **Interval in days** – Specify the number value in the field.

The search result is displayed as shown below with objects which are revised since last 3 days.

- **Interval in hours** –Specify the number value in the field.

The search result is displayed as shown below with objects which are revised since last 60 hours.

- **Interval in minutes** – Specify the number value in the field.

The search result is displayed as shown below with objects which are revised since last 30 minutes.

Search

Revised Objects Changed Since ▼

Interval in minutes ⌄

30

➕ ▼ Reset Search

Displaying 3 of 3 results Show Details

Name	
> **Asset Push 1 Queue** *ID = AssetPush1*	
> **DTP Queue** *ID = DTPConfiguration*	
> **NSLJAssetpush** *ID = NSLJAssetpush*	

Search Result Profiling

Search Result Profiling

3 hit(s)
Click links to narrow down search

Results by Object Type

Special types (3)

📁 Asset Push Event Queue (3) - exclude

Search: Sample Result

The Sample Result Search Criterion allows users to refine the search results to only those specified numbers. When the 'Sample Result' criterion is selected, one input field 'Sample Result Size' is displayed below it. If a user enters a random number and clicks on Search, the search result will be zero. Hence, this search should always be appended to an existing search and entering a numeric value for 'Sample Results Size' will further refine the search result based on the entry

For example, a user searches for a set of products below a hierarchy that displays a set of results which has 16 products. To do so they go to the Search tab > Search Below option in the Search dropdown > and choose what node to search below. For more on how to search below, refer to the **Search: Search Below** topic.

Now, the user wants to append the results with the 'Sample Result' search criteria. To do this they will keep their original search, but select the plus sign > Sample Results > and enter a number. In this example '10' is used to define the Sample Results Size. The search result will give random results.

Notice that the results will display and not go above the specified sample results size number. If this Search button is clicked multiple times, the sample search results will change each time, though always staying below the specified sample number.

Search: Search Below

The **Search Below** Search Criteria allows you to limit your search result to objects below a specified node in the **System Setup** or **Tree** tab hierarchy.

> **Note:** The search below option can be applied to the following object types only: attribute, classification, collection, entity, product, and publication.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Search Below** from the dropdown.

3. Click the ellipsis button (**...**) to display the **Search Below...** dialog. By default the Primary Product Hierarchy is selected as search criteria.

4. Select a node in the hierarchy and click the **Select** button.

5. Click the **Search** button

The Results displayed includes only items at or below the selected node. Additionally, the selected node for the search below criteria will also be included in the search results. In the example shown below, Hats and Caps Items is also included in the search result

Search: Search from List

With the **Search from List** search criteria you can search using a list of data. This data can be manually entered into the user field or pasted in from another source, such as an Excel spreadsheet or Smartsheet. Users may specify whether the entered data should be used to search for object IDs, names, key values, attributes values (with specification of the particular attribute), or other criteria. This makes **Search from List** an efficient and easy way to find large numbers of objects in STEP and, in combination with other available search option, suitable for highly complex and extensive searches.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Search from List** from the dropdown to display a text field and dropdown with a number of options based on your system.

   In this example, we choose **Search from List: ID**, which allows specifying the data list in the text field and searching by 'ID' (selected from the dropdown).

3. Use one of the following methods to enter the data list to search in the text box:

- Manually use the **Enter** key to create a line break between each value.
- Copy data from Excel or any other application where line breaks or tabs are included to separate the values. Each value must be listed on a line or be separated by a tab delimiter, without any characters (including bullet indicators and spaces) around it. Refer to the **Using a Data List from an External Application** section below.

4. If needed, click the green plus button () to add additional search criteria.

5. Click on **Search** to run the search and view results.

Each of the 'Search from List' options available from the dropdown are described and illustrated below.

Search from List: ID

Search by specifying the ID in the list text field and selecting 'ID' from the dropdown, as shown in the example above.

Search from List: Name

Search by specifying the object name in the list text field and by selecting 'Name' from the dropdown.

Enter the values to search into the text field. Click **Search** to run the search and view results.

The search results display with the name of the objects specified in the data list.

Search from List: Key

Search by specifying the key values in the list text field, and by selecting the key from the dropdown.

In this example, the search results display with the Supplier Part Number that holds values specified in the data list.

It is important to keep in mind that:

- Only active keys will be available as an option in the dropdown list.
- Active Keys that have values in products can be searched.
- Searching for active keys with empty values in a data list field will NOT return search results.

For more on keys and how to activate them, refer to the **Unique Keys** documentation.

Search from List: Attributes

Search by specifying the attribute values in the list text field, and by selecting the option 'Attribute' from the dropdown.

Note: Description attributes are displayed under the product hierarchy node in the folders for which they are valid.

The search results display with the attributes specified, in this case it is the attribute 'Color' which holds values of 'Orange.'

It is important to keep in mind that:

- Only one attribute can be selected from the Attribute Group browse / search window to be used as search criteria.
- Inherited attribute values (hierarchical inheritance) can be specified in the data list. The result set includes the object that contains the searched value as a local value. While this object may not match an object type restriction, it points to the origination of the searched text.
- Attribute values inheriting from other contexts can be specified in the data list.
- Calculated Attribute value (description or specification attributes) when specified in data list, will NOT be displayed with any search result. (This restriction is not limited to the Search from List functionality.)

Using a Data List from an External Application

Copied data can come from Excel or any other application as long as line breaks or tabs are included to separate the values. To copy data in, each value must be listed on its own line or separated by a tab delimiter, (tab key from keyboard) without any characters (including bullet indicators and spaces) around it.

In the example below, IDs have been copied over from an external file. Data can be horizontal or vertical as long as the appropriate line breaks or tabs are in between the values.

Search: Search in Publication Hierarchy

Objects below a specific publication hierarchy can be searched, and the status or a specific result can be determined, by using the 'Search in Publication Hierarchy.'

Keep in mind that this search is **not** used to search for different templates (such as products, publications, or page templates) or to search number of objects / links placed in product template. It is only used to search the objects below a specific publication hierarchy.
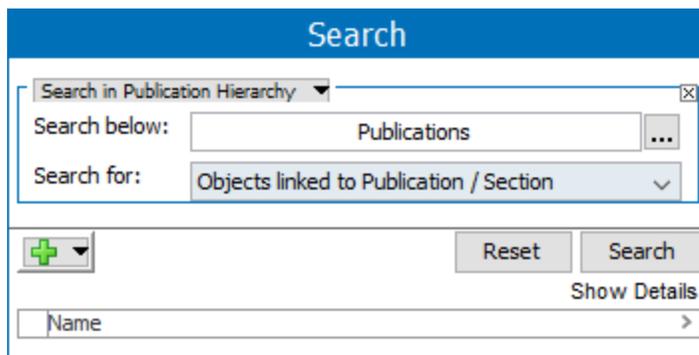
> **Note:** To use 'search in publication hierarchy' in the Search tab, it is recommended to have prior knowledge of Print Publisher and the publication hierarchy. For more information, refer to the **Publication Hierarchy** section of the **Publisher (Adobe InDesign Integration)** documentation.

To search in a publication hierarchy:

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Search in Publication Hierarchy** from the dropdown.

> **Note:** The search criteria requires no data input. However, it is helpful to further refine the search by pressing the plus sign button (➕), and entering in information to limit the search results.

3. Supply information for the following parameters:

- ○ **Search below**: Used for choosing a node. Select either the publication group or publication. The search result will display all matched product objects which are under the selected publication group or publication.
- ○ **Search for**: Specifies what object is being searched.

Search for

The available options in the dropdown are:

1. **Objects linked to Publication / Section**: When this option is selected, products and assets linked to a publication will be displayed in the result.

2. **Objects in Assortment Lists**: This is a legacy component.
3. **Objects in Baskets**: The products saved in a Basket will be displayed in the results.

4. **Object on actual pages**: the product and asset are used on actual pages (DTP documents) and will display the results field.

5. **Object on planned pages**: The products and assets used on planned pages will be displayed in the result.

Search: STEP Workflow

With the **STEP Workflow** search criteria you can search for and monitor STEP workflows. Selecting a specific workflow from the dropdown list will show all items associated with the workflow. You can also specify the workflow state to narrow your search.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **STEP Workflow** from the dropdown to display two additional dropdowns with options based on availability in your system.

   In this example, 'Sales Item Creation' will be used for the STEP Workflow search field.

3. For the State dropdown, specify the state to search within.
   - Select a state defined in the workflow to search only items currently in the state.
   - Select [any State] to search the entire workflow, as shown in this example.

- Select [not in STEP workflow] to search objects which are not present in the selected workflow.

4. If needed, click the green plus button () to add additional search criteria.

5. Click **Search** to run the search and view results.

Search Result Profiling

5 hit(s)
Click links to narrow down search

Results by Object Type

Product (5) - exclude

     SalesItem (5) - exclude

Results by Position in Tree Hierarchy

Results by Parent

     T-shirts (4) - exclude
     T-shirts and Sweatshirts (4) - exclude
     Tire Care SalesItems (1) - exclude

Search: Unapproved

This criteria is used to identify objects that are not currently approved. These include classifications, products, images and documents, and entities setup to be Workspace revisable.

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Unapproved** from the dropdown.

3. Select the appropriate radio button and set the checkbox:
    - **Never Approved or Modified in Main**: All objects that have 'Never been approved' and have been 'Modified in main'.
    - **Never Approved**: Objects (products, classifications, assets & documents, or entities) that are workspace revisable and that have never been approved.

- **Modified in Maintenance**: Objects that are modified after the approval or added to in the maintenance workspace.

- **Status in Current Context**: When this box is checked, only the current context is searched. If unchecked, all objects in all contexts are searched.

4. If needed, click the green plus button () to add additional search criteria.

5. Click **Search** to run the search and view results.

Search: Unpushed or Failed Assets

The Unpushed for Failed Assets search criteria allow you to identify assets that have not been successfully pushed. These assets have an Asset Push Status of 'Never been handled', 'Asset not in workspace,' or 'Error.'

1. Click on the **Search** tab and click the Search dropdown.

2. Select **Unpushed or Failed Assets** from the dropdown.

3. Click the ellipsis button (...) to display the **Select Asset Push Configuration** dialog.

4. Select a configuration and click the **Select** button.

5. Click the **Search** button to display the Search Results List and Profiling information.

Search

Unpushed or Failed Assets ▾   ⊠
Configuration: Asset Push Configuration 1 A (AssetPushConfig1) [...]

[➕▾]   Reset   Search
Displaying 58 of 58 results   Show Details

Name
> 📘 **555-2033_M** *ID = 8801*
> 📘 **20695 back** *ID = 20700*
> 📘 **20695 main** *ID = 20701*
> 📘 **20695 side** *ID = 20702*
> 📘 **910835** *ID = 910835*
> 📘 **910836** *ID = 910836*
> 📘 **ACME Comfy bed** *ID = 22215*
> 📘 **Battery** *ID = 22326*
> 📘 **blue cap** *ID = 20809*
> 📘 **Caulk, case** *ID = 8235*
> 📘 **Caulk, single** *ID = 8236*
> 📘 **Coffee Maker** *ID = 22191*
> 📘 **Cup1** *ID = 28062*
> 📘 **Cup2** *ID = 28063*
> 📘 **Cup3** *ID = Cup3*
> 📘 **display** *ID = 22616*

◀ **Search Result Profiling**   ⊶

Search Result Profiling

58 hit(s)
Click links to narrow down search

Results by Object Type

Asset (58) - exclude

 📘 Product Image (40) - exclude
 📘 Owners Manual (6) - exclude
 📘 Export Manager Configuration (2) - exclude
 📘 Logo (2) - exclude
 ➕ Icon (2) - exclude
 📘 Installation Manual (2) - exclude
 📘 Import Manager Configuration (2) - exclude
 📘 Assets (1) - exclude
 📘 Configuration (1) - exclude

Results by Position in Tree Hierarchy

Results by Parent
(Displaying the 5 most common)

 📁 Assets (17) - exclude
 📁 MA (7) - exclude

Note: Click an item in the list to view it, or click a profiling link to update the search results list.

STEP Workbench Keyboard Shortcuts

Within STEP Workbench there are many shortcut key combinations that allow users to quickly navigate and make changes through the system. The following tables list and describe the options available for Shortcut Key options.

Basic Shortcuts

Shortcut	Description	Shortcut Key
Copy	Creates a duplicate of the information selected that can be pasted somewhere else.	Ctrl + C
Cut	Takes away information that can be pasted into a different location if desired.	Ctrl + X
Duplicate	This duplicates the item selected, with the option to duplicate references as well.	Ctrl + J
Goto	This brings the user to the Goto field in the upper right hand corner of the workbench screen where items are looked up.	Ctrl + G
Goto Next	Finds the next item that most closely matches what the user is looking for. The results may differ depending on what tab the user is in and working with, or what area is selected as active.	Ctrl + E
Help	When workbench is open, displays a new window that with the STEP Online Help documentation.	F1
Next	Shifts the focus to the next cell.	Tab
Paste	When information that was either cut or copied from before is placed into an alternate area.	Ctrl + V
Previous	Shifts the focus to the previous cell.	Shift + Tab
Redo	Goes to the changed sate, if the change was reversed.	Ctrl + Shift + Z

Shortcut	Description	Shortcut Key
Reload	Reloads the workbench and updates to any changes made.	F5
Select All	When the desired area is clicked in or is already the active area, pressing this key combination will choose everything in this particular area.	Ctrl + A
Undo	Goes back to the original state before the change was made.	Ctrl + Z

Navigate to Main Side Bar Tabs in Workbench

Shortcut	Description	Shortcut Key
Background Process Tab	Unless a product is being viewed, this will bring the user to the Background Processes tab. If a user is on a product, this key combination will not transpire.	Alt + P
Bookmarks	Brings the user to the Bookmarks side tab.	Alt + M
System Setup Tab	Brings the user to the System Setup tab.	Alt + Y
Search Tab	Leaves the user looking at what they were on in the main frame, but brings up the Search Tab along the left hand side.	Ctrl + F
Tree Tab	This will bring a user to the Tree Tab only if not viewing an item in Tree in the main screen, or having an item still show up in the main screen even though navigation has been away from it.	Alt + T
Workflow Tab	Navigates to the STEP Workflows tab.	Alt + W

Navigate to Horizontal Tabs within Main Sidebar Tabs

To navigate to the horizontal tabs within the main tabs in workbench, press Alt + (the letter underlined on the tab).

For example, if a workflow is selected within System Setup, pressing **Alt + S** displays the **Status** tab for the workflow being viewed because 'S' is the underlined letter for the Status tab.

Note that options for shortcut keys to horizontal tabs vary depending on what item is selected and in what main tab a user is located (Tree, Search, Background Processes, System Setup, Bookmarks, and STEP Workflow). Not all tabs have underlined letters for shortcut key options.

General Shortcuts Useful in Workbench

Shortcut	Description	Shortcut Key
Add Bookmark	When on an object and this is pressed, it will add the item to the bookmark list on the Bookmark tab.	Ctrl + D
Add Element	When adding various elements, pressing this key combination will often (not in all cases), bring up a dialog allowing the user to add to the desired list.	Ctrl + Plus
Approve Object	When in Main, approves an object that was previously unapproved.	Ctrl + Shift + J
Mark Different (On multi-product display)	In Tree, when viewing multiple products at once, or when viewing the horizontal Sub Products tab for an item, selecting this key combination will mark all areas that are different green.	Shift + F12
New Window	With STEP Workbench open, this will open an additional STEP Workbench window.	Ctrl + N
Remove Element	When deleting various elements from lists or rows, pressing this key combination will often remove the desired connection or item.	Ctrl + Minus
Rotate Table (On Multi-Product display)	In Tree, when viewing multiple products at once, or when viewing the horizontal Sub Products tab for an item, this rotates the table view if the table is the active area.	F11

Shortcut	Description	Shortcut Key
Toggle attribute values selection between blinking cursor and blue filter	When on a field that is editable, selecting F2 allows the user to write in the field. When pressed again, the entire field turns blue, rendering it entered and non-editable, unless F2 is pressed again or the field is clicked into again.	F2

Insert Options

Shortcut	Description	Shortcut Key
Insert Action Set	In System Setup, when in the Action Sets, pressing this key combination will create a child Action in an Action set.	Ctrl + Shift + S
Insert Asset	The Create Asset dialog appears when in Tree.	Ctrl + Shift + A
Insert Attribute	Displays the Create Attribute dialog in System Setup.	Ctrl + Shift + T
Insert Attribute Group	In System Setup, this creates a new Attribute Group if sitting on the proper level.	Ctrl + Shift + I
Insert Background Process to Monitor Deadlines / STEP Workflow Deadline Monitoring	This allows a user to set up a background process to monitor states with exceeded deadlines in the desired time frame.	Ctrl + Shift + D
Insert Character Tag	When typing in a field and this is selected, a dialog appears allowing the user to select from character tags.	Ctrl + R
Insert Classification	In Tree, this inserts a new yellow folder, or classification.	Ctrl + Shift + C
Insert Classification Root	In Tree, a new Classification Root or top node yellow folder is created.	Ctrl + Shift + R

Shortcut	Description	Shortcut Key
Insert Dimension	In System Setup, when sitting on the top node for contexts, clicking these keys will bring up the dialog to create a new dimension.	Ctrl + Shift + D
Insert Dimension Point	In System Setup, when on a dimension, selecting this will create the dimension point.	Ctrl + Shift + M
Insert Group	In System Setup, when on the node that houses Users and Groups, selecting this key combination will create a new group.	Ctrl + Shift + G
Insert List of Values	In System Setup, when sitting on the top node for List of Values, pressing this will bring up the dialog to create a new List of Values.	Ctrl + Shift + L
Insert non-breaking space	Enters a non-breaking space when editing attribute values.	Ctrl + Enter
Insert Orphan Attribute	When on a product, this will insert an orphan Attribute, which will appear in italics.	Ctrl + Shift + O
Insert Product	When in Tree, this will create a new object under the one selected.	Ctrl + Shift + P
Insert Special Character	When in a field that allows typing, selecting this brings up a list of characters that can be selected and inserted into the field.	Ctrl + Shift + E
Insert STEP Workflow	In System Setup, when on the top node for workflows, or when inside the node for workflows, selecting this will bring up a new STEP Workflow Designer window to create a new workflow.	Ctrl + Shift + R
Insert Workspace	In System Setup, when on a workspace, selecting this key combination will create a different workspace.	Ctrl + Shift + W

Linking Options

Shortcut	Description	Shortcut Key
Link Asset	When on References or References By tab, this allows asset links or references to be selected and put into the appropriate folders. Note that the Reference Type can be changed from the drop-down menu in the dialog that appears.	Ctrl + Shift + F
Link Attribute to Classification	To link an Attribute to an item, select the item that needs the attribute and select this key combination. Linked attributes will appear in the References tab under the 'Attributes' flipper.	Ctrl + Shift + Y
Link Attribute to Product	When on a product, selecting this key combination links an attribute to a product.	Ctrl + Shift + K
Link Classification to a Product	This links a classification to a product. It can be found under the Reference tab under the 'Linked Attributes to Classifications Hierarchy' flipper.	Ctrl + Shift +H
Paste Link	Creates a new reference (pointer or link) to an existing / copied object. An example would be if the user copied a SKU from a blue folder and pasted it into the yellow folders. Note that object types need to be compatible.	Ctrl + L
Link Product / Create Link	When on References or References By tab, this allows product links or references to be selected and put into the appropriate folders.	Ctrl + Shift + Q

Style Options

Shortcut	Description	Shortcut Key
Bold	When typing in a filed, this activates bold text.	Ctrl + B
Character Tag	Opens the Insert Character Tag dialog for adding character tags to attribute values.	Ctrl + R
Italic	When typing in a field, this activates italic text.	Ctrl + I
Non-breaking	Enters a non-breaking space when editing attribute values.	Ctrl +

Shortcut	Description	Shortcut Key
Space		Enter
Special Character	Opens a dialog showing the most recently used special characters, as well as an option to select to view all special characters. Allows user to select a special character to insert when editing attribute values.	Ctrl + Shift + E
Style	This key combination can be pressed to bring up the Style box, where there are a number of styles to choose from.	Ctrl + Y
Rich Text Editor	Opens the Rich Text Editor in STEP Workbench when editing an attribute value.	Alt + F2
Paste and Match Style	When in a field, if 'text A' is copied from one area and is going to be pasted into 'text B' that is a different style, pressing this key combination will make it so the copied 'text A' will past into 'text B' with the style of 'text B'.	Ctrl + Shift + V

Flatplanner Shortcuts

Shortcut	Description	Shortcut Key
Save (In Flatplanner)	This save what is being worked on.	Ctrl + Alt + S
Zoom In (In Flatplanner)	This zooms in on what is being worked on.	Ctrl + Plus
Zoom Out (In Flatplanner)	This zooms out of what is being worked on.	Ctrl + Minus