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Preface

The *Agile Product Lifecycle Management for Process Content Synchronization and Syndication User Guide* contains instructions for inspecting specifications for compliance in Agile Product Lifecycle Management (PLM) for Process.

This preface contains these topics:

- **Audience**
- **Variability of Installations**
- **Documentation Accessibility**
- **Related Documents**
- **Conventions**

**Audience**

This guide is intended for end users who are responsible for creating and managing information in Agile PLM for Process. Information about administering the system resides in the *Agile Product Lifecycle Management for Process Administrator User Guide*.

**Variability of Installations**

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

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Related Documents
For more information, see the following documents in the Agile PLM for Process Release 6.1 documentation set:

- Agile Product Lifecycle Management for Process Administrator User Guide
- Agile Product Lifecycle Management for Process Content Synchronization and Syndication Configuration Guide
- Agile Product Lifecycle Management for Process Release Notes. Up-to-date Release Notes and other documentation are posted on Oracle Technology Network (OTN) at this location:

  http://www.oracle.com/technetwork/documentation/agile-085940.html

Conventions
The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Introducing Content Synchronization and Syndication

This chapter presents an overview of Content Synchronization and Syndication and describes a few basic features. Topics in this chapter include:

- **Overview**
- **Touch Points with Other Applications**

**Overview**

Content Synchronization and Syndication (CSS) publishes, or syndicates, a subset of Global Specification Management (GSM) specification data to external or downstream systems from Agile PLM for Process. CSS typically syndicates this data using an XML-based format. CSS supports several distribution methods. It allows syndication of a subset of GSM specification data to distributed enterprise systems, trading partners, and industry exchanges, such as 1Sync.

CSS syndicates GSM specification data to downstream systems based on specific configurable publication targets.

**Publication Targets**

CSS is integrated into the process of developing publishable specifications within GSM. As specifications are developed, they can be syndicated to configured publication target systems. These publications, or target destinations, can be internal or external systems. Additionally, CSS syndication message requests, or publications, can be tied to a workflow.

**Workflows**

These publication workflows can be integrated with GSM specification workflows. This integration allows a publication to move to a different state in the workflow automatically when the specification the publication is tied to reaches a customer-defined state in the specification workflow. Refer to the *Agile Product Lifecycle Management for Process Administrator User Guide* for more information on CSS workflows.

**CSS Configuration**

For information about configuring CSS, see the *Agile Product Lifecycle Management for Process Content Synchronization and Syndication Configuration Guide.*
For general information on using Agile PLM for Process software, see the *Agile Product Lifecycle Management for Process Getting Started Guide*.

**Touch Points with Other Applications**

Use Content Synchronization and Syndication (CSS) in conjunction with the Global Specification Management (GSM) application to syndicate specification data.

**Global Specification Management**

You can create and manage CSS publications on the following Global Specification Management (GSM) specifications:

- Trade specifications
- Formulation specifications
- Material specifications
- Packaging material specifications
- Printed packaging specifications


**Workflow Administration**

CSS workflows can be created using the Workflow Administration (WFA) application. Refer to the *Agile Product Lifecycle Management for Process Administrator User Guide* for more information.
This chapter describes the capabilities and applied uses of the Content Synchronization and Syndication product. It includes the following topics:

- What are Publications (TIPs)?
- Creating New Publications in GSM
- Trade Item Page
- Validation
- Workflow

**What are Publications (TIPs)?**

Publications are preconfigured objects that define the final destination of the data being syndicated. These publications are referred to as TIPs, or Trans-active Item Publications.

Use publications to send specification data to internal and external systems using a standard output structure. You can configure publications to tailor the transport mechanism, message, and TIP workflow to fit your individual needs.

**Internal Publications**

Internal publications refer to systems that reside at the same company, such as an ERP or other back-end system. You can create internal publications for supported specification types. You can configure publications for trade and formulation specifications so that select pieces of the trade and formulation hierarchies are syndicated. You can choose which components of the hierarchy you wish to publish and create the publications all at once, and you can select what specifications to publish down to the top level formulation specification. If a top level formulation specification is selected, the entire hierarchy below is syndicated automatically.

**External Publications**

External publications refer to systems outside of the company. An example of an external syndication is 1Sync, or any other Global Data Synchronization Network (GDSN) compliant data pool. External syndications only create a publication on the specification you specifically request. It is a configuration option to automatically create publications on child specifications based on workflow rules if you determine that is a requirement.
What are Publications (TIPs)?

The following sections define many of the configurations that are available to tailor publications to meet your specific needs.

**Workflow**

Publication workflows are built to assist in the management of publications. Publication workflows give you the ability to configure actions like email notifications, permissions, transitions, and statuses for publications.

Publication workflows are associated with GSM workflows to create a more automated syndication environment. This feature enables a publication to transition in the workflow automatically when the specification it is tied to reaches a particular workflow state. Workflows can be created using Workflow Administration (WFA).

**Extended Attributes**

Extended attributes can be added to publications.

**Validations**

You can define different validation rules to run against a publication using validators. Validators are software components that are "plugged in" through a configuration file. This feature enables you to perform validation on a publication before sending the data to a target system.

**Message Generators**

You can configure publications to use different message formats for each publication. This feature enables different message structures to be provided based on where the data is destined.

**Message Transporters**

You can define different transport options for configured publication paths. This feature enables messages to be delivered based on the transport requirements of the target system.

**Message Reconcilers**

You can define different reconciler options for each publication path. This feature enables different message conversations to be handled and reconciled accordingly.

**Action Items**

The Action Items page displays a list of all publications that identify you as the current owner. To access the Action Items page, click **CSS > Action Items** from the left navigation panel. You can open a publication by clicking anywhere in the corresponding row. To re-sort the contents of the page, click on the column title you wish to sort by and the contents of the Action Items page are re-sorted.
Creating New Publications in GSM

Creating New Publications in GSM

Single publications for supported specifications are not created from the CSS application. Publications (TIPs) are actually created on the CSS tab of specifications in GSM. Once created, these publications can be managed on the CSS tab of the specification or they can be managed inside the CSS application. Publications are validated in GSM. Refer to "Validation" on page 2-9 for more details. For more information on GSM, see the Agile Product Lifecycle Management for Process Global Specification Management User Guide.

To create a new publication:

1. Click the CSS tab on the specification to be syndicated, as shown in Figure 2–2.

2. Click Add New. The publications requirements dialog box displays, as Figure 2–3 shows:

For information on the Mass Workflow tab, refer to "Mass Workflow Tab" on page 2-11.
3. Specify the following required data:

- **Manufacturer** — Defines the source of the data being syndicated. For Global Data Synchronization Network (GDSN) compliant target systems, this is the Global Locator Number (GLN) of the information provider.

- **Publication Type** — Used for GDSN compliant target systems. Typically this is used to tell retailers if it is the first time they have received this product information or if they already have it and should update their information.

- **Publication Path** — Defines the destination for the syndicated data. Publications are organized by target market. Target market is a GDSN term used to indicate the country where the trade item is available for sale. For example, the US and Canada are two different target markets.

**Note:** This information resides on the Summary tab of the saved publication. See Figure 2–5, "Summary tab", on page 2-6 for more information.

4. Click **Done**. GSM creates the publication.

5. Click **Save**. The publication is now included in the publication table on the CSS tab of GSM, as Figure 2–4 shows. The default starting status for publications depends on the configuration of the publication workflow. For more information on publication workflows, see "Workflow" on page 2-10.
To work with the newly created publication, click the publication link in the Trading Partner column. Clicking the link opens a dialog box in the CSS application.

**Note:** You cannot view publications with a current status of "Draft". Statuses are controlled and updated automatically by the publication workflow.

---

**Trade Item Page**

**Summary Tab**

Once the initial publication is created, it expands into the Trade Item page in CSS, shown in Figure 2–5. You can also access this page by clicking a corresponding row in the CSS Action Items list.
The Summary tab includes the following sections:

- **Summary Information Section**
- **Extended Attributes Section**
- **Attribute Overrides Section**
- **Catalog Responses Section**

**Summary Information Section**

The Summary Information section of a publication displays the key information that was entered initially as well as the following information:

**Status** — The status of the publication based on the CSS workflow it is tied to.

**GS1 Status** — Used for publications destined for 1Sync and is the status of the addition of this specification to the global registry.

**Item Type** — If applicable, this is pulled from the item type field on the trade specification.

**Last Updated** — Last date the publication was updated.
Extended Attributes Section

Use extended attributes on publications to capture publication specific data and enhance the data being sent to a particular destination. For more information on extended attributes, see the Agile Product Lifecycle Management for Process Getting Started Guide.

Note: The publication must be in edit mode to add extended attributes. To put the publication in edit mode, click Edit.

Attribute Overrides Section

Use the Attribute Overrides section to override related specification data with extended attribute data that exists on the publication.

The attributes that may be overridden are configurable by data type. The following are the trade specification attribute overrides that are preconfigured within the system:

- Available Date—Date
- Case Gross Weight—Numeric
- Net Weight—Numeric
- Case Height—Numeric
- Case Length—Numeric
- Case Width—Numeric
- Case Volume—Numeric
- Each Height—Numeric
- Each Length—Numeric
- Each Width—Numeric
- Each Volume—Numeric
- Product Name—Free Text
- Layers per pallet—Numeric
- Cases per layer—Numeric
- Pallet Gross Weight—Numeric
- Pallet Net Weight—Numeric
- Pallet Height—Numeric
- Pallet Length—Numeric
- Pallet Width—Numeric
- Pallet Volume—Numeric

Catalog Responses Section

The Catalog Responses section gives details about what type of messages were created and their individual status. It is possible to have multiple statuses inside of a given publication status.

For instance, when CSS sends trade specification data to 1Sync, a single publication typically has three unique messages generated. It generates an Add, Modify, and Publish message. Within the message conversation with 1Sync, independent
information on each of those messages is returned. The Catalog Responses section displays this information.

The Catalog Responses section includes the following columns:

- **Type** — The type of transaction within the publication corresponding to a unique message generator.
- **Created** — The date and time the message was generated.
- **Status** — The status of the unique message.
- **Result Message** — The message sent back from the target system if applicable. If a publication fails, the result message supplies supporting information on why it failed.

**Signatures/Approval Tab**

The Signatures/Approval tab shows the information that relates to the CSS workflow tied to this publication, as Figure 2–6 shows. This information is generated by the system and cannot be changed.

*Figure 2–6  Signatures/Approval tab*
Validation

Once a publication has been created on a specification, you can run pre-configured validations against it. Doing so tells you if there are any problems with the data before sending it to the destination defined on the publication. For more information, refer to the *Agile Product Lifecycle Management for Process Content Synchronization and Syndication Configuration Guide*.

Validating a Publication

To validate a publication, click **Validate For Publication** on the CSS tab of the specification in GSM. When you validate a publication, the validation rules defined for that publication are investigated against the related specification data. If there is more than one publication on a specification, the validation rules configured for the publications are run and the error messages that exist display at the top of the CSS tab, as Figure 2–7 shows. You can tell which specification is causing the error condition because the error messages contain the specification number.

**Figure 2–7  Validate for Publication and sample error message**

Once all of the errors are resolved and the validation routine passes, a message that states that the publication is valid for publication is displayed, as Figure 2–8 shows.
Workflow

Once a publication is validated, you can advance it to a publishable state and send it to the recipient defined in the publication. To workflow an individual publication, click the Trading Partner link on the CSS tab of the GSM specification. This action opens the publication in a CSS dialog box. To advance the publication, click Workflow in the action menu. A workflow dialog box displays, as shown in Figure 2–9.

Figure 2–9 Workflow dialog box

Select the appropriate workflow status from the drop-down list and then click the move step forward icon ( ) to push the publication forward in the workflow. If an appropriate reverse transition has been defined and you want to move the publication backwards in the workflow, select the appropriate workflow status from the drop-down list and then click the move step back icon ( ).
Mass Workflow Tab

The Mass Workflow tab in CSS enables you to move multiple publications from one status in the workflow to another.

When you first access the Mass Workflow tab, there are compressed lists of publications that are grouped by status, as shown in Figure 2–10.

![Figure 2–10 Mass Workflow tab](image)

Every unique status in the workflow that has a publication identifying you as the owner shows on this page. Initially, all of the publications within the groups are hidden. Open the list of publications that are in a particular status by clicking **Show**. This expands all of the publications you own in that status. Click **Hide** to compress the list.

Next, select the individual publications you want to move from one status to the next. To do this, select the check box next to the publication you want to move. Once you have selected all of the publications within the status you want to move, click **Action Selected Items**. A workflow dialog box displays, as Figure 2–11 shows.
**Figure 2–11  Workflow next action**

Select the appropriate workflow status from the drop-down list, enter comments associated with this workflow transition and then click the move step forward icon (➡️) to initiate the workflow process. Once you have initiated the workflow, the Mass Workflow page automatically updates.

**Mass Publications**

Mass publications give you the ability to syndicate multiple trade specifications to a single publication. Mass publications are created in CSS.

**Mass Tip Creation**

To create a mass publication, click **New** in the action menu. This feature is only available for trade specifications.

Mass publications are composed of two sections shown in **Figure 2–12:** Summary Information and Specification(s).
Figure 2–12  Mass TIP Creation

Summary Information Section
Use the Summary Information section to add information that helps define the publication for the group of specifications being syndicated:

- **Trading Partner** — Defines the destination for the data being syndicated. As discussed on page 2-1, these can be internal or external. Publications are organized by target markets. Target market is a GDSN term used to define areas of the world.

- **Publication Type** — Publication type is typically used for GDSN syndications. It tells retailers if this is the first time they have received this product information or if they already have it and should update their information.

- **Manufacturer** — Defines who the data being syndicated is coming from. For GDSN syndications, this is the information provider’s Global Locator Number (GLN).

Specification(s) Section
Use the Specification(s) section to add the trade specifications to syndicate.

To add trade specifications, click **Add New** and use the search page to select the trade specifications to publish, as shown in Figure 2–13.
Once you select all of the specifications to publish, click **Done**. The selected specifications are returned to the specifications section of the mass publication.

Once you find the specifications you are looking for, select the individual specifications to publish. To do this, select the check box next to each specification, as **Figure 2–14** shows. If the check box next to the specification is grayed out, that specification has already been published to the target system you selected and is no longer available for publication.
Once you select all of the specifications you want to publish and complete the Summary Information section, click **Publish**. The system creates publications to the selected trading partner on all of the specifications selected. You will still need to perform workflows on the publications as usual.