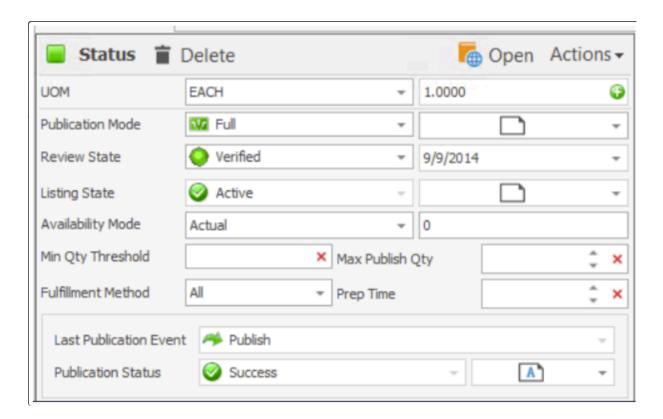
Listing Lifecycle Management

Lifecycle Management (LCM) is an enhanced capability that has been implemented to provide better information about listings throughout their entire lifecycle.

The feature is implemented at the ChannelType level, and is currently supported on Amazon channels. Channels which have not been updated to support LCM will continue to use the previous Status based design.

The primary difference users will see between the previous Status-based approach and LCM is that there is a new field called Listing State, which replaces status.



Listing State

Listing State reflects the state of the listing on the Remote Sales Channel (meaning the marketplace or website where the listing will be published).

Listing State is not a value which can be set by a user. Listing State is always set by a system process.

The following values are possible:

• Created - Initially created, never published. Allows for differentiation from New.

- New Exists in EVP but not on Remote Sales Channel.
- Active Fully published (Listing, Inventory, Price), and available for purchase on Remote Sales Channel.
- Deleted Listing has been deleted on the Remote Sales Channel, but the listing has been kept in EVP. This may also reflect a listing that is awaiting total removal from EVP but has not been removed yet.
- Delisted Successfully delisted (removed or inactivated) from the Remote Sales Channel.
- Inactive Listing exists on the Remote Sales Channel, but the item is not available for sale due to error, missing data, or no available quantity for sale on the Remote Sales Channel.
- Disconnected Manual intervention is required by the user to correct an issue with the listing.
 For example, sometimes Amazon reports that it successfully deleted a listing, but the listing was not actually deleted.

A history of Listing States is kept on the listing in EVP so users can track the lifecycle of a listing over time.

Publication Events

Publication Events describe the various types of publication activities that may occur. The following values are possible:

- None No outstanding publication requests
- Publish Publish listing to Remote Sales Channel
- Delete Delete listing (entirely remove) from the Remote Sales Channel
- Delist Inactivate the listing on the Remote Sales Channel the method of delisting may vary depending on the sales channel's capabilities.
- Relist Reactivate the listing on the Remote Sales Channel

Publication Event Results

Once a publication event occurs, the result of that event is recorded. The following values are possible:

- None No action has been taken yet
- Publishing Data has been sent to the Remote Sales Channel but EVP is waiting on a response
- Success An affirmative successful response has been received from the Remote Sales
 Channel
- Warning A successful response has been received from the Remote Sales Channel, but a warning was also received

- Error An error response was received from a Remote Sales Channel
- Incomplete No response was received from the Remote Sales Channel within the allowed time frame

A history of Publication Events and the results of those events are kept.

Publication History Notes

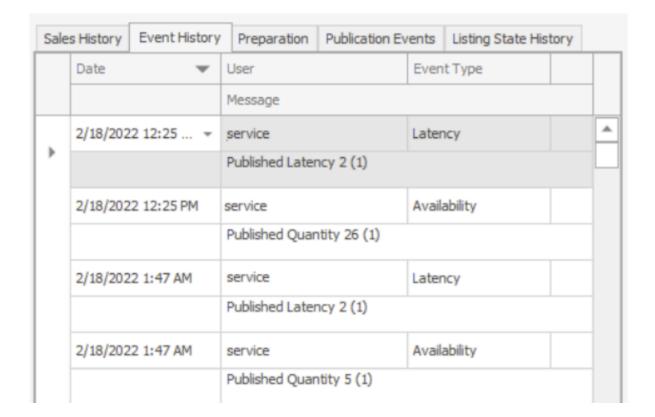
Previously when an error was encountered during publication a listing was placed into Error status. Now, publication errors are stored and shown in three new fields.

Full Publication results are managed through the Publication Events structure.

| Last Item Pub Ev 🔺 | Last Item Pub Status | Last Item Pub Note |
|--------------------|----------------------|--------------------|
| Publish | Success | Success |
| Publish | Incomplete | |
| Publish | Success | Success |

For publication of Price, Availability, and Shipping Templates, the results are shown in three new fields. The related notes field is updated after every publication

| Availability Pub Notes | Shipping Pub Notes | Price Pub Notes |
|--------------------------------------|--------------------|-------------------------------------|
| Publication warning 92003 / Duplicat | | Success (UTC: 1/13/2022 12:09:30 AM |
| Publication warning 92003 / Duplicat | | |
| Success (UTC: 1/15/2022 10:31:58 | | |
| | | Success (UTC: 1/16/2022 12:16:26 AM |
| | | Success (UTC: 1/16/2022 12:16:56 AM |
| | | Success (UTC: 1/16/2022 12:16:37 AM |
| | | Success (UTC: 1/16/2022 12:15:02 AM |



Retired Fields

When a Channel Type is converted to support LCM features, the following Fields are no longer used:

- Status
- LastUpdateStatus
- StatusNote

Other UI Changes

Several other changes have been added to the UI to support the LCM feature.

- The Sales Channel Listings grid now has a column for listing state. For LCM enabled channels
 this value will be filled in and the Status field will be blank. For Non-LCM enabled channels the
 opposite is true.
- The data that is sent to the Remote Sales Channel for each publication event is saved in the Event History. Users can now look in the Event History instead of having to look at the file that was submitted.



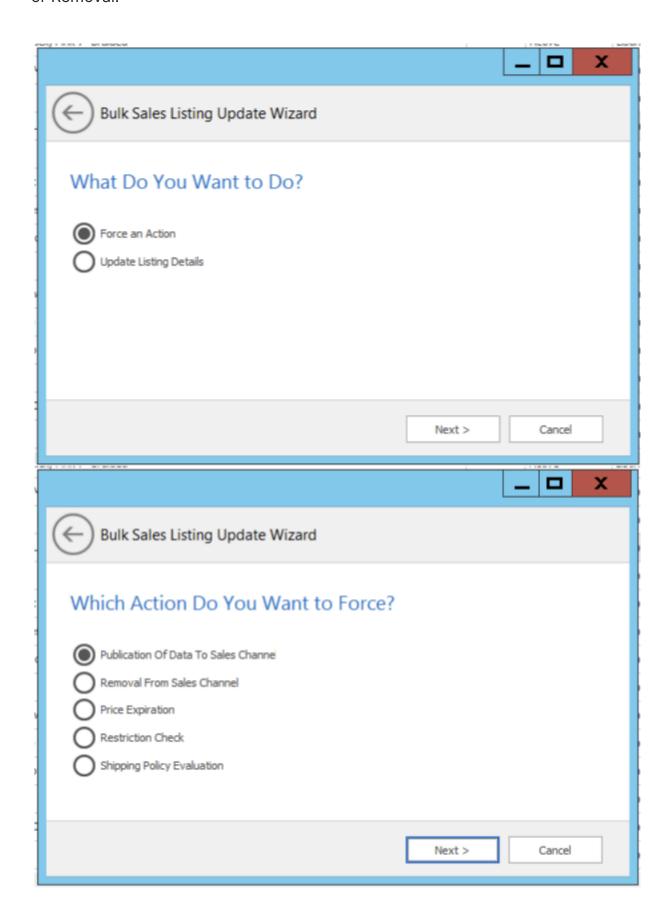
• Publication Events History is now located on the Listing Detail screen.

| Event Pt | | Publication Status | | Start | End | |
|--|-------------|--------------------|-------------------|----------------------|-----|--|
| Message | | Published | | | | |
| Publish Success | | SS | 2/18/2022 12:59 | 2/18/2022 2:00 PM | | |
| Success | | | | 2/18/2022 1:00 PM | | |
| Publish | blish Error | | 2/18/2022 9:57 A | M 2/18/2022 11:59 AM | | |
| Error - 8541: The SKU data provided is diffe | | | provided is diffe | 2/18/2022 9:57 AM | | |
| | | | | | | |

• Listing State History is now located on the Listing Detail screen.

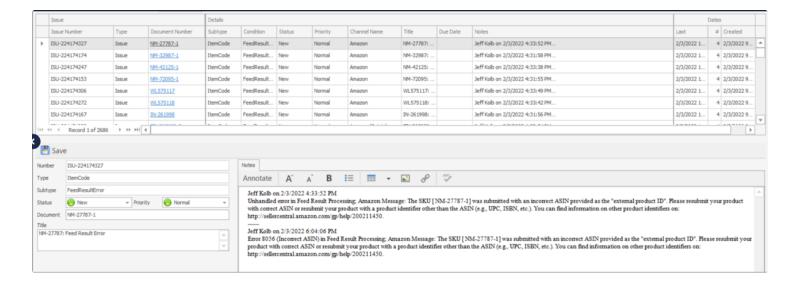
| Dares i notor j | Event History | Preparation | Publication Events | Listing State History |
|-----------------|---------------|-------------|--------------------|-----------------------|
| State | | | Start | End |
| Notes | | | | |
| Active | | | 2/18/2022 6:27 P | M |
| | | | | |
| Inactive | | | 2/18/2022 2:00 P | M 2/18/2022 6:27 PM |
| | | | | |
| New | | | 2/18/2022 9:25 A | M 2/18/2022 2:00 PM |
| | | | | |

The Bulk Update Wizard has been updated to reflect LCM changes. On LCM channels, instead
of updating the Status field to delete or republish items, you now force an action of Publication
or Removal.



Issues

When publication of an item generates an error, an Issue will be created. Users can use the Issues screen to identify listings which require attention to successfully publish.



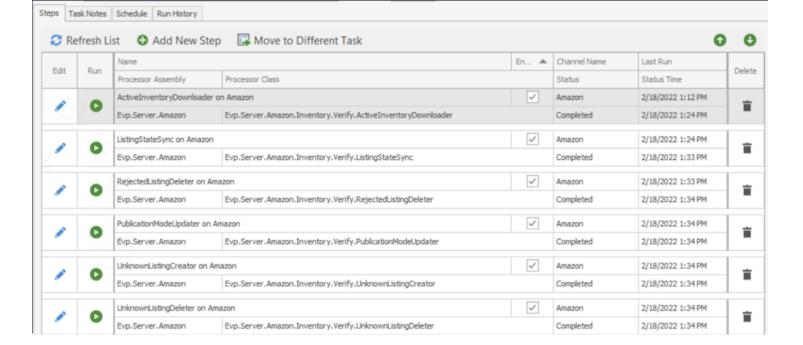
Amazon Channels

With the introduction of Lifecycle Management to Amazon channels, a number of other new capabilities were enabled.

Item Verifier

A new Item Verifier was created. This new Item Verifier uses a table-based model where the data from the Active Inventory Report is loaded into a database table when the processor runs. The data can then be used for reporting.

The LCM Item Verifier uses a step-based approach to provide for granularity in control on what the Item Verifier does.

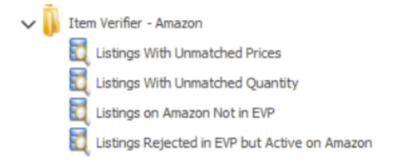


- Active Inventory Downloader Downloads an Active Inventory Report from Amazon and loads the data into a database table. Recalculates Item Verifier Metrics. Creates Item Verifier Data Sources.
- Listing State Sync Sets the listings states in EVP to the listing states found on Amazon. This is the primary method for keeping an Amazon catalog in sync.
- Rejected Listing Deleter Creates a Delete Publication Event for any items which are Rejected in EVP but found as Active on Amazon.
- Publication Mode Updater Sets listings found as Active on Amazon to PriceAvailability mode.
- Unknown Listing Creator Creates an EVP record for any listings that exist on Amazon but don't exist in EVP.
- Unknown Listing Deleter Deletes from Amazon any listing that is not in EVP.

Note: By running the Unknown Listing Creator first and the Unknown Listing Deleter second, EVP will create any listings it can, and then deletes any listings which cannot be created. For example, if a listing exists on Amazon but it is restricted in EVP, the Creator will not be able to create the listing, and the Deleter will delete it.

Data Sources

Because the data from the Active Inventory Report is in the database, we can now report off of the data. Four new Data Sources are automatically created by the Active Inventory Downloader to reflect data which may be useful in managing an Amazon channel.



Monitor Metrics

In addition, several Monitor Metrics are created by the Active Inventory Downloader. These metrics will allow you to track the performance of a metric over time to see if you are making progress towards a goal, or to see how the system is performing. For example, the number of Listings Not in EVP but on Amazon should trend toward zero over time. If it does not, manual intervention is necessary to correct the issue.

