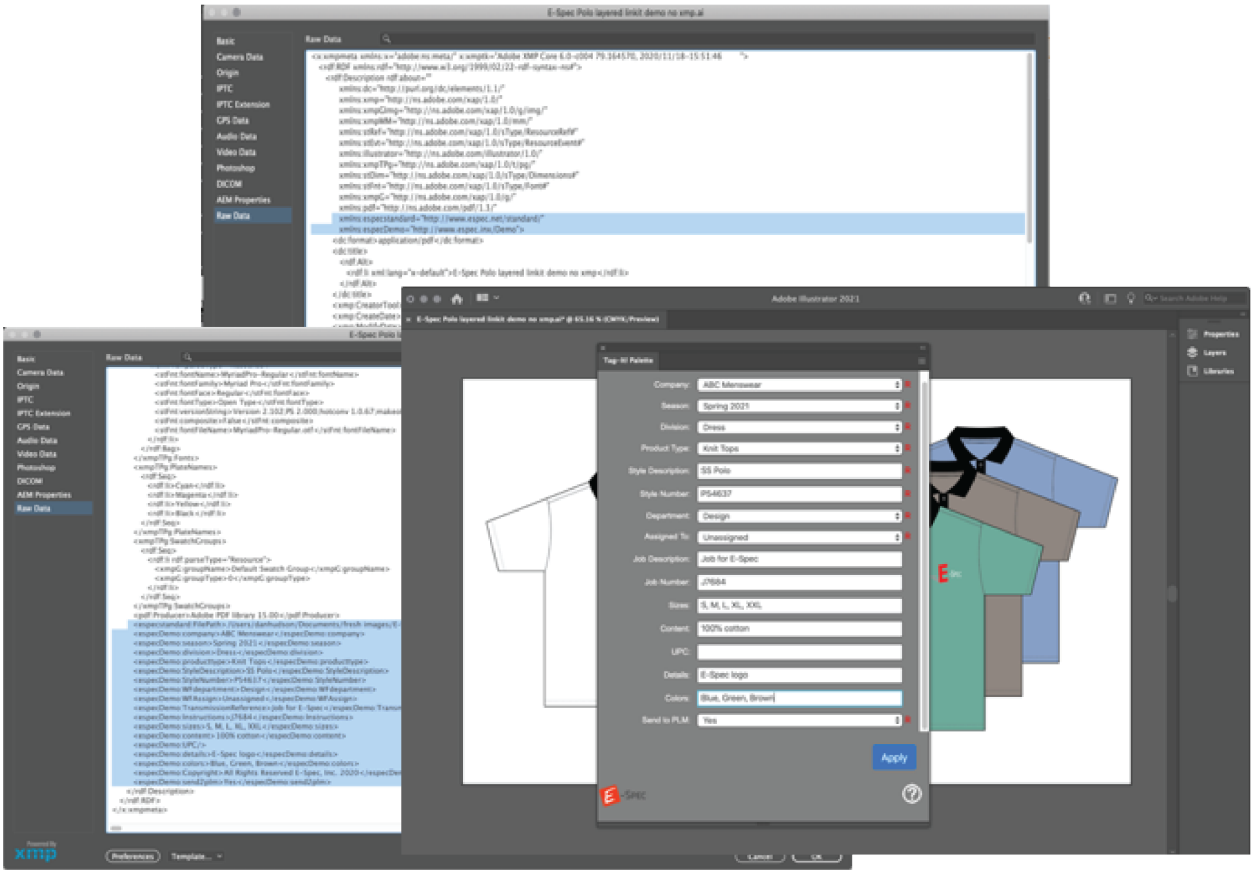

Custom Embedded XMP metadata – make your assets "Self-Aware"

Embedded – metadata is stored in the file not linked to an external database or DAM system.

Custom – the metadata schema, namespace, tag names and controlled vocabulary are defined by the company instead of using an existing industry provided schema.

Custom embedded XMP is useful for data that currently resides in file/folder names; this information can be lost as the file is copied, moved or emailed. Embedding the metadata in the file ensures the metadata travels with the file.

Custom embedded XMP also ensures that data which cannot be determined by visual examination of the content is not lost; it is captured from the user during creation. The user knows the how, why, who, where, when and what that may not be "seen" in the file's content.

E-Spec has been using XMP metadata in integration projects since 2006. All this time I thought the XMP standard was widely understood in the digital graphics world. Recently I found out

how wrong I was. While metadata has become widely known in the last few years, XMP still lives in the shadows. People seem to act like only the data fields provided by industry standard schemas are available in XMP. I found customers "stuffing" their data into existing XMP fields and ignoring the label being displayed. Their integration scripts look for the data in "Job Description" and "Transmission Reference"; the data had nothing to do with that XMP schema. I found DAM vendors using an open source command line tool (EXIFTool) which simply scrapes all readable text in the file and provides it to the programmer to deal with. No reference to the XMP schema is provided; the XMP Tags are simply text, leaving the programmer to guess which data is associated with the XMP Tag. These vendors are not leveraging the power of XMP, they are treating it like keywords.

While various industry standards groups have created and endorsed XMP schemas, these are not the end all for XMP. XMP is meant to be used with custom schemas (extensible is literally in the name). Custom schemas are actually simple to create. There are open source SDKs to read and write XMP (including custom schemas). What I have found is rather than bother creating a schema, the data is be forced into existing industry schemas. This can make a quick "point" solution but it is not a viable long-time strategic metadata approach.

Our approach when integrating graphics to multiple business systems is to look across all systems for the common data elements and then at each individual system to determine which data elements comprise an index to their records. These data elements are then used to define the customer's custom XMP schema. We then examine the expected values for each of these data fields (customer's controlled vocabulary) and create data sources for the corresponding XMP fields. UI dialogs for each User Group are then defined; these dialogs are displayed to collect data from the users at their step in the defined workflow. The collected XMP metadata is embedded in the graphic. Many DAM systems will ingest the XMP as it catalogs the graphic files; other systems provide an API (SOAP or RESTful) that will accept the XMP along with the file. Since the XMP includes the fields which provide system indexes, the graphic has now created a link between the multiple participating systems. Because the XMP is embedded; when the file is shared outside the company, the data is available to the partner/contractor/vendor and can be ingested into their systems (which might be DropBox and/or Adobe Bridge).

Adobe has just released an update to their free Custom XMP Metadata Panel extension. While we define our own custom XMP schemas, they can be shared (bi-directional) with Adobe's extension using JSON. Your custom XMP data captured by Adobe's extension can be viewed (and edited if permissions are granted) in Tag-It!'s dialogs and Tag-It!'s XMP can be viewed (and edited if permissions are granted) in Adobe's extension. In both cases the XMP can be used in Adobe Bridge, Adobe AEM, all Adobe File Info dialogs as well as third party applications with XMP support (they need to have a place to enter the XMP schema config in their system) which includes most enterprise DAM systems.

To learn more about custom embedded XMP, please use the links provided below or reach out to us at sales@e-spec.net or visit www.e-spec.net

XMP info and SDK:

https://www.adobe.com/devnet/xmp.html

Adobe Custom Metadata Panel:

https://exchange.adobe.com/creativecloud.details.103752.custom-metadata-panel.html

Tag-It! Intro:

https://vimeo.com/510769098/b1f19df178

Tag-It! compared to Adobe panel:

https://vimeo.com/529053649/b8deba1129