

Original Use cases of DIAGRAMMAR, reviewed for DPUB PWP
Please add your comments to the various topic areas if you feel these use-cases apply to PWP.

Use Cases (May 10, 2011)

Use Case Definition to Facilitate Definition of the Content Model for DIAGRAM.

Goal: Use Cases and/or Stories are intended to help the team effectively define a content model for DIAGRAM to implement as part of the overall standards effort.

Directions: Please create a h2 for each use case. Start the use case with a name. Provide a detailed description; enough information to understand the use. Follow this with a list of requirements associated with this use case. Use my first use case and requirements as an example.

The use cases below are grouped into the following Categories:

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USE Case - Alternative Media Producer (AMP)

- As a publisher of accessible content, I need to add content such as a braille style sheet, image descriptions, or video captioning (text / descriptive audio) to a PWP previously published by a third party.

Description: The authoring tool developer creates software applications to view and edit image descriptions.

- atd_01 As an authoring tool developer, I need to be able to easily find the content model specification and validate my content for compliance with the specification
- atd_02 As an authoring tool developer, I need to be able to transform the content model into HTML that can be rendered in a modern browser via HTML
- atd_03 As an authoring tool developer, I need revisions to the specification to be backward compatible
- atd_04 As an authoring tool developer, I need my application to understand what version of the content model specification I'm dealing with.
- atd_05 As an authoring tool developer, I need to be able to provide a mechanism to insert image descriptions into multiple versions of the DAISY standard (e.g. as PRODNOTES or LONGDESC)
- atd_06 As an authoring tool developer, I need to offer a mechanism for searching image description repositories to find what descriptions others might have contributed for the book I'm describing.
- atd_07 As an authoring tool developer, I need to support the entry of text, tables, lists, MathML/LaTeX and other XML structures that allow the user to navigate the image.
- atd_08 As an authoring tool developer, I need to be able to support crowdsourcing, moderation and workflow features.
- atd_08 As an authoring tool developer, I need to be able to enter links to other versions of the image - e.g. SVG, tactile graphics, etc.

Use case: As user of assistive technology, I want to perceive the full PWP. (Requirement: PWP needs to support rendering for non-visual output, tactile output, and audio output, and they must synchronize.)

Use case: Simplified Language

Use case: Package needs to support Time based media and Text such as audio synchronized with text, Video synchronized with Text, sign language sync with text.

Childrens picture book is fixed layout that will turn the page and reads.

Alice wants to download a PWP that captures the external resources, such as a braille style sheet, extended media description, which she needs to perceive the PWP. (Is this actually more a use case around implementation? Or perhaps retail?)

Bob is deaf and wants to download a PWP for off-line use, and would just like to contain the text not any audio that he will not need.

Personalization of PWP for disability.

Dyslexic reader may want to add a dyslexic font that is locally available.

Use case: As a buyer I want to discover what accessibility features \ are available in this publication which match my preferences. For example I require captioning because I am deaf and I before I purchase if this is included in this package. If you are a school or an educator if this will be accessible by my students.

Original Publisher(op)

Description: The publisher of a work has the author or editor to provide some essential information about the image or graphical content included.

- op_01 purpose: (required) There is text that provides the purpose for the graphical item. Depending on the context, graphical content can have different purposes. This expresses the publisher's reason for the graphical item. It is expected that this would be simple prose and does not draw from a controlled vocabulary. Note, it is not expected that graphical content that carries no information (purely ornamental) would be provided.
- op_02 concept: (optional) The graphical content may be attempting to convey one or more concepts. key words which identify the concept should be included. This makes it possible for a reading system to search for other resources that convey the same concept.
- op_03 rights metadata: (optional) The publisher may choose to include information about the rights associated with the graphical item. This may be in one or more metadata elements.
- op_04 alternative description allowance: (required) The publisher or the author could state that only the authorized image description can be distributed.

Sharing Descriptions (sd)

Description: Creating descriptions can be time consuming and complicated. A description may be very detailed and it may include tactile graphics. It is desirable to take advantage of these descriptions wherever available. For example, a person may create a short description of the concept being presented and link to a description that covers the same concept. It may also be possible for a reading system or a search engine to discover descriptions that have the same concept or tags.

- sd_01 link to another description: (optional) If a known link to a more extensive description has been identified, it could be placed directly in this description. It is expected that the short description would provide the specific context, but then explain that this is treated comprehensively at the provided link. For example, short description would say that this Periodic Table of the Elements is displayed in this book, but a comprehensive description is provided at the link below.
- sd_02 image description resource: (optional) It should be possible to link to a specific database of image descriptions, e.g. ImageShare from RNIB.
- sd_03 List of image libraries: (optional) It might be possible to link to a Internet resource that contains a listing of the known image libraries. Each time a new collection effort is established, the new resource could be added to the list.
- sd_04 federated search of image libraries: (optional) It may be possible for a search to be created that looks across the listed image libraries for a description that meets the concept associated with the description.
- sd_05 tagging description: (optional) In addition to the concept in the description, additional tags could be added to assist in searching.

Volunteer (v)

Description: Creation of alternate formats, such as image descriptions, oftentimes will require

- v_01: As a volunteer, I need to be able to find descriptions to add that fit within my area of subject matter expertise and language.
- v_02: As a volunteer I need the ability to revert to a previously saved version of an image description in order to restore something that was inadvertently deleted.

Volunteer Coordinator (vc)

- vc_01: As a volunteer coordinator, I need to be able to assign work based on skills sets of my volunteers.

Moderator (m)

- m_01: As a moderator, I need to be able to monitor quality of descriptions going into a repository.

Accessible Media Facilitators

Description: Accessible Media Facilitator Use Cases are targeted towards all users that will participate in finding and distributing accessible media to 3rd parties (the Consumers below). These include some of the following types of users as examples:

- Educators
- Parents
- Disabilities Specialists

Special Educator / Assistive Tech Specialist (sped)

Description: These are generally users familiar with assistive technology and working in an educational environment to create and provide means to deliver educational materials in an accessible form to their students/clients. They are often limited on time and technology tolerance and serving multiple students in different environments at once.

- sped_01 As a (sped), I'd like to be able to pull together concepts of educational curriculum being delivered in different topic areas for students. For example, I will create a lesson plan that includes both the textbook chapters on geometry and supplement as needed with additional assignments and lessons that help convey a topic - e.g. classifying triangles by their angles. Being able to search and find accessible media that fits the criteria of 6th grade geometry and even further for angles and/or triangles would help me get my lessons to my students far more quickly to help them keep up with the rest of class or provide consistent lesson plans to all.
- sped_02 As a (sped), I'd like to create curriculum and lesson plans by reviewing available accessible media options (tactile or audio), grade levels, some idea of the concept being conveyed, and some idea of the number or quality of the accessible media (has it been reviewed, was it delivered by the content creator or supplemented, is there a rating applied to it, etc.) and incorporating them based on my criteria of conceptual goal, grade level and quality to incorporate.
- sped_03 As a (sped), when I find suitable accessible media to incorporate into my lesson plans, I'd like the option to revise or supplement the accessible media to fit the needs of my particular students.
- sped_04 As a (sped), I am searching for alternate formats of media and may find that there are multiple versions of an image description suiting various different purposes and I'd like to easily select the one that fits my purpose for the same image.

Consumer / Reader Use Cases

Description: Consumer / Reader Use Cases are targeted towards all users that will be the ones needing to have digital media in alternate formats. These include some of the following types of users as examples:

- Blind Users
- Low Vision Users
- Dyslexic Users
- Cognitively Disabled Users

Blind Web User (bwu)

Description: This is the most basic use case. A person who is blind finds an image that presents detailed information. He discovers a link to a description and activates the link. The expectation is that there is sufficient information to understand the graphic.

- bwu_01 Short description: (required) There is a short description of the graphical content. This would be longer than what is normally found in alt text. It would be sufficient for many graphics.
- bwu_02 Longer description: (optional) If graphical content cannot be described sufficiently in a short description, a longer description can be included. This should supplement the short description and provide sufficient information for a blind user to understand the graphical content in its context.
- bwu_03 Tactile graphic: (optional) The blind reader may discover that there is a tactile graphic for use with a graphical system. Either a touch screen or it could be embossed or produced on a raised line printing device. The person would download the file for printing, or the file may be presented in the web browser and the person could create the tactile graphic from his attached printer. Swelling paper would also be an option for such a system.

- bwu_04 Text description of the tactile graphic: (optional) Complex tactile graphics may require a description to understand the tactile graphic. In many cases the text could be available to the reader while reviewing the tactile graphic.

Low Vision (lv)

Description: While the short and long descriptions designed for a blind user should be sufficient for the person with low vision, it may be necessary to include additional information for the low vision user.

- lv_01 Alternative image: (optional) The original image may be too complex for a low vision user. An alternative image can be useful in conveying the information. For example a detailed map with many streets and roads could be simplified by only providing the main roads.
- lv_02 Text of alternative image: (optional) It may be necessary for a textual description to be provided which explains the alternative image. This is similar to the text for the tactile graphic, but is geared towards the low vision user.

DAISY Reading System (DRS)

Description: DAISY or other reading systems are expected to present the information to the reader. There may be reading systems that have specific options for reading descriptions or that are optimized for certain types of end users, e.g. deaf and blind, low vision, learning disabled.

- drs_01 selecting type of user: (optional) The graphical content resources should be able to identify the target population to be served. For example, many of the fields may be generally useful, while others are specific to a type of end user. For example, tactile graphics are useful for blind, deaf and blind, and low vision end users. It should be possible for the reading system to programmatically identify the target end user of the various resources provided.
- drs_02 links to additional resources Description: (optional) If there are shared resources, such as a shared description library, the reading system should be able to identify this as an internal (with the packaged content) or external (on the Internet) resources they can go to.
- drs_03 automatic search of external databases Description: (optional) The reading system should be able to gather information, such as the purpose or the concepts conveyed, and search external resources for content. The content in the fields that may be used must be identified so the information can be used in the query. For example, a reading system may take the purpose or a concept and search a link that is provided, or the reading system may have several image/diagram databases that it uses to provide additional information.
- drs_04 permanent bookmarks. The user should be able to create a bookmark point in a position inside the image description and that bookmark should somehow be preserved in new version of the description.

DAISY Online Reading System (DORS)

Description: A DAISY reading system that reads a book stored on an Internet Server.

- dors_01 locate alternative image descriptions: The server should be able to locate alternative image descriptions for an specific image and present the user the various descriptions (ex.: a technical description of a picture and a figurative one). It should have a navegation mechanism to allow the user to choose from the available descriptions. Or should the DORS reader be able to seek for alternative descriptions of an image?
- dors_02 feedback system: (optional) The user should be able to insert comments or a rating associated to the image description stored on the server.

DAISY Offline Reading System (DOFRS) with internet capability

Description: A DAISY reading system that reads a book locally stored that has internet connection capability.

- dofrs_01 download image descriptions: when opening a book, the DOFRS should should search for updates or alternative descriptions and offer the user to choose which one to read. If a new one is choosen, it should be stored locally. The reader should store a history of the descriptions it has used?

Search Engine (se)

Description: Search engines may take advantage of the descriptions in several ways. First, they could use the text in the descriptions to find identified images. Secondly, this information could be used to provide information about the accessibility of content others are looking for.

- se_01 link to description: (Duplicated in other places) There must be an easy to identify link associated with an image whose semantics identify it as a description of the image.
- se_02 disabilities served: (optional) While a search engine may return information that a description is available, it might be more helpful if the description identified the target audiences served by the description, e.g. blind, low vision, learning disabled. However, it may be just as useful for the search engine to return a simple identification of the resources in the description, e.g. purpose, short description, tactile graphic. This would depend on the extent of use that the specification receives.
- du_01 xxx:

Learning Disabled User (ldu)

- ldu_01 xxx:

Intellectually Disabled User (idu)

Description: Persons with intellectual disabilities can benefit from descriptions of images.

- idu_01 simplified vocabulary: (optional) A short and or long description may use simplified language, which may make the description easier to understand.