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Boost Your Customer Experience in AEM with Auto Tagging

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Our Speakers

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- **Adobe and PoolParty partner**

- Content strategy, workflows, tools consulting
- XML & DITA services
- Requirements gathering & solution design
- Pilots & proofs of concept
- Taxonomy & ontology
- Business case development
- Change management

Semantic Web Company (SWC) and PoolParty

SWC is developer / vendor of **PoolParty Semantic Suite**

Most complete and secure **Semantic Middleware / Semantic AI platform** on the Global Market

W3C standards compliant

ISO 27001:2013 certified

First release in 2009

Current version **8.0**

On-premises or **cloud-based**

Over **200** **installations world-wide**

Semantic AI: Fusion of Graphs, NLP, and Machine Learning

Named as Visionary in **Gartner's Magic Quadrant** for Metadata Management Systems 2019, 2020

KMWorld listed PoolParty as one of the **Trend-Setting Products** 2015 - 2020 and listed SWC in the **AI 50** list of companies in 2020

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Outline

- About Semantic Booster for AEM
- Demo of auto-tagging with Semantic Booster for AEM
- The importance of taxonomies and taxonomy management
- Demo of taxonomy management and term extraction in PoolParty

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Semantic Booster for AEM

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Connects PoolParty enterprise taxonomy management tool to AEM

Use PoolParty's powerful taxonomy & semantic features to enhance AEM tagging

Why enhance AEM Tags?

AEM Tags are its native taxonomy management feature

Tags can be applied to any object

They drive navigation, search, SEO, and personalization

But they have some limitations

- Synonyms not supported by default
- Polyhierarchy not supported
- Tags change if you move or rename the term

Semantic Booster features

- **Sync** a set of AEM Tags from a taxonomy in PoolParty
  - Manage tags in an enterprise system developed for taxonomists, with an open API
  - Creating a term, moving, re-naming or deleting it all synced
  - Supports synonyms and poly-hierarchy
  - Persistent IDs maintain the relationship of tags to tagged pages

- Use **AutoTagging** to tag AEM pages against synced terms
  - In multiple languages
  - Tag on synonyms as well as preferred terms
  - Synced tags can also be used for manual tagging

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Demo

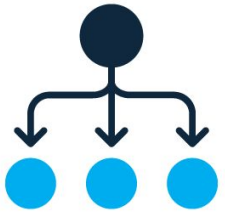
Semantic Booster Summary

- Semantic Booster sources and updates a set of AEM tags from a taxonomy in PoolParty
- Manage tags in an enterprise system, using a specialist environment that can connect to other systems via API
- Make full use of multilingual support, (poly)hierarchical relations and synonyms
- Use the multi-lingual autotagging feature to automatically tag AEM pages against taxonomy terms
- Creating a term, moving, re-naming or deleting it all synced
  - Persistent IDs maintain the relationship of tags to tagged pages

Taxonomy Management

Taxonomies

Why taxonomies for tagging?



- Support consistent tagging
- Provide consistent metadata
- Improve retrieval *precision* by focusing on concepts, not just words
- Improve retrieval *recall* by not missing content/data due to different synonyms or variant names (alternative labels)
- Provide context for understanding through a hierarchical structure
  - For end-user browsing
  - For tagging, whether manual or automated

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Taxonomies

What is a taxonomy?

Controlled and ***organized***

- A kind of controlled vocabulary or knowledge organization system, based on unambiguous concepts, not just words.
- Concepts are arranged in a structure of hierarchies, categories, or facets to organize them.

Benefits of taxonomies

1. Controlled vocabulary

Brings together different wordings (synonyms) for the same concept

- Helps people search for information by different names

2. Classification and structure

Organizes information into a logical structure

- Helps people browse or navigate for information
- Provides context and meaning for concepts for indexing and retrieval

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Taxonomy Standards

ANSI/NISO Z39.19 *Guidelines for the Construction, Format, and Management of Monolingual Controlled Vocabularies*

ISO 25964 *Thesauri and Interoperability with other Vocabularies*

- Comprehensive best practices for thesaurus design and creation
- Support good user experience and good results
  - No circular relations, no conflicting relations, no reused labels, etc.

SKOS (Simple Knowledge Organization System)

- A World Wide Web Consortium (W3C) standard
- Integrates with other Semantic Web standards, such as RDF and OWL
- Machine-readable and human-understandable
- Supports interoperability, sharing and linking of taxonomies

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Taxonomy Management

Why use a dedicated taxonomy/thesaurus management tool (PoolParty Thesaurus Management)?

- Optimized for taxonomy management ease of use (drag & drop, etc.)
- Compliant with **SKOS** and **RDF**, and **ANSI/NISO** and **ISO** thesaurus standards.
- Supports custom quality settings.
- Supports multiple users, user privileges, workflows, and approvals.
- Exports/imports spreadsheets and various RDF XML formats.
- Has APIs for additional software integrations.
- Enables central management of taxonomy(s) for use in multiple applications.
- Includes taxonomy enrichment tools:
  - Corpus term extraction, linking to public vocabularies, cardsorting
- Can be semantically enriched with an ontology and extended into a knowledge graph.
- Can link multiple taxonomies with mappings between matching concepts.

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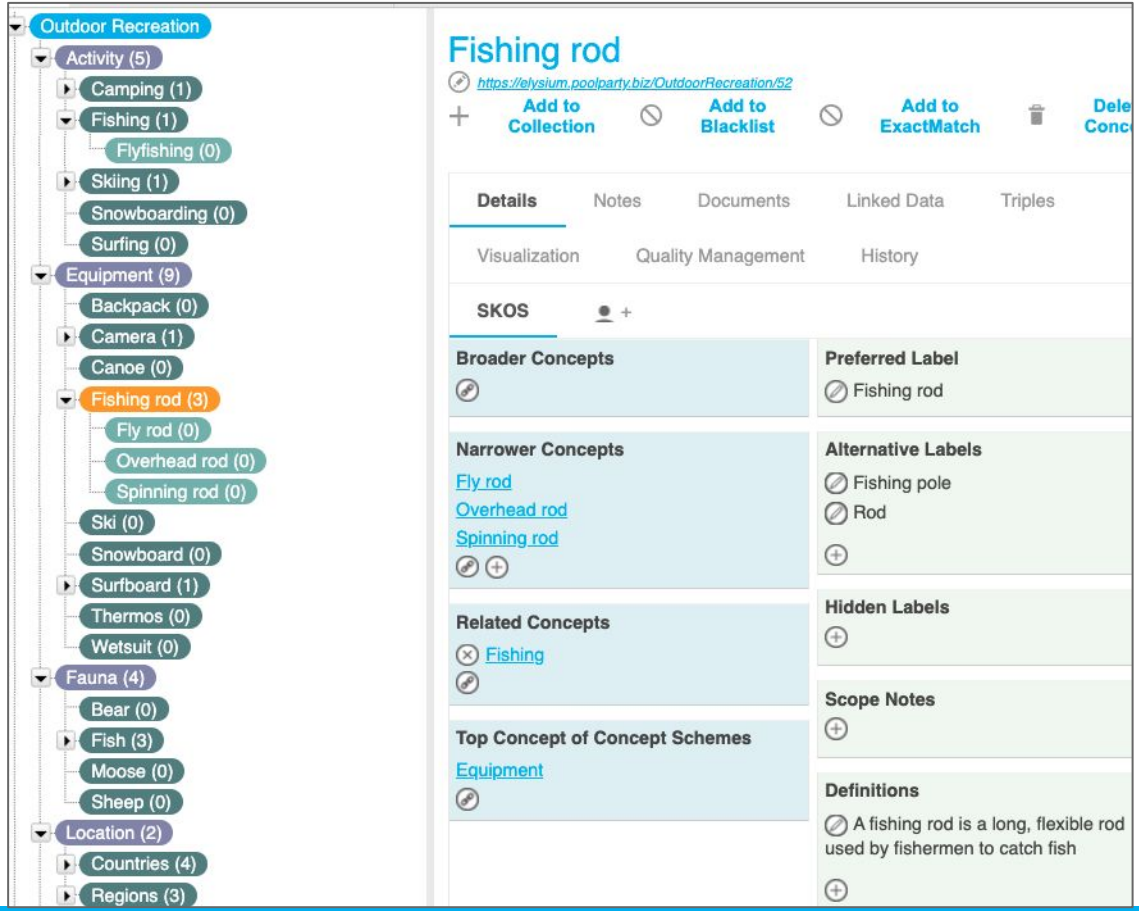
Taxonomy Management

Taxonomy features supported in PoolParty

- Alternative labels (synonyms)
- Hierarchical (broader/narrower) and associative (related) relationships
- Polyhierarchy (concept has more than one broader concept)
- Scope notes and definitions
- Multilingual concepts
- Linking taxonomies by mapping matching concepts



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Text Mining for Auto Tagging

What is text mining?

- An application of text analytics, utilizing AI technologies of Natural Language Processing (NLP).
- Extracting passages from text that are relevant in a particular business context.
- Automatically deriving information, and not merely strings of words.
- Transforming unstructured text into meaningful information.

Text Mining Tool: **PoolParty Extractor**

- A software component of PoolParty that extracts meaningful phrases, named entities, and taxonomy concepts from documents and text.
- Leverages the taxonomies you have built in PoolParty:
  - Considers taxonomy concept relationships and alternative labels
- Performs named entity recognition (NER) extraction
  using pre-trained libraries (of persons, locations, organizations) and custom entities.

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Demo

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10-minute Semantic Booster video

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