

Semantic Web, organize and publish your data



MR-96 3 Days (21 Hours)

Description

The main techniques for describing resources and publishing on the Semantic Web are approached from a practical angle. At the end of this training, the participant will be able to define a strategy adapted to their objectives and implement it by publishing their data on the Semantic Web.

Who is this training for ?

For whom

Data administrators, project managers and web designers.

Prerequisites

Aucune

Training objectives

- Understanding the architecture of the Semantic Web Publish, store and validate linked data
Understanding the RDF Data Model and RDFS Schemas Search for semantic data Create an
OWL ontology

Training program

Données liées (Linked Data) et modèle RDF

- Presentation of linked data.
- Why publish your data in the form of Linked Data? What data should you put in Linked Data?
- Presentation and interpretation of the RDF model.
- Establish RDF links to other data sources.
- Benefits of using the RDF data model.

La méthode de description des ressources

- Definition and use of URIs.
- Dereferenceable URIs.
- Content negotiation.
- Choose URIs.
- What to return as an RDF description for a URI.

Quels vocabulaires utiliser ?

- Find suitable vocabularies.
- Create your own vocabulary.

Publier, stocker et valider des données liées

- Serve static RDF files, Linked Data views of databases and other types of information.
- RDF repositories.
- Validation services and Linked Data browsers: Tabulator, Marbles, OpenLink RDF Browser, Disco.

Rechercher les données avec SPARQL

- Creating and publishing an RDF description.
- Finding information using SPARQL.

Les schémas RDFS

- Why associate an RDFS schema with an RDF description? Elements of the RDFS language (classes, properties).
- Create an RDFS schema.
- Identification and declaration of classes and subclasses.
- Creating instances.
- Defining properties.
- Practical work Find schemas adapted to your objectives.
- Create a compliant RDFS schema and RDF description.

Les ontologies

- What is an ontology? Why develop an ontology in a Semantic Web approach? Creation of an ontology.
- Define the domain and scope.
- Identify the vocabulary.
- Define the hierarchy, classes, attributes, cardinalities, types.
- Create the instances.
- Practical work Create an OWL ontology.
- Publish it on the Semantic Web.

Les techniques

- Semantic hypertext.
- Semantics embedded in HTML pages.
- Use of metadata.
- Microformats.
- eRDF, RDFa, GRDDL.
- Practical work Around a case study: define metadata, create microformats, create semantic descriptions in RDF form and the schema Associated RDFS.