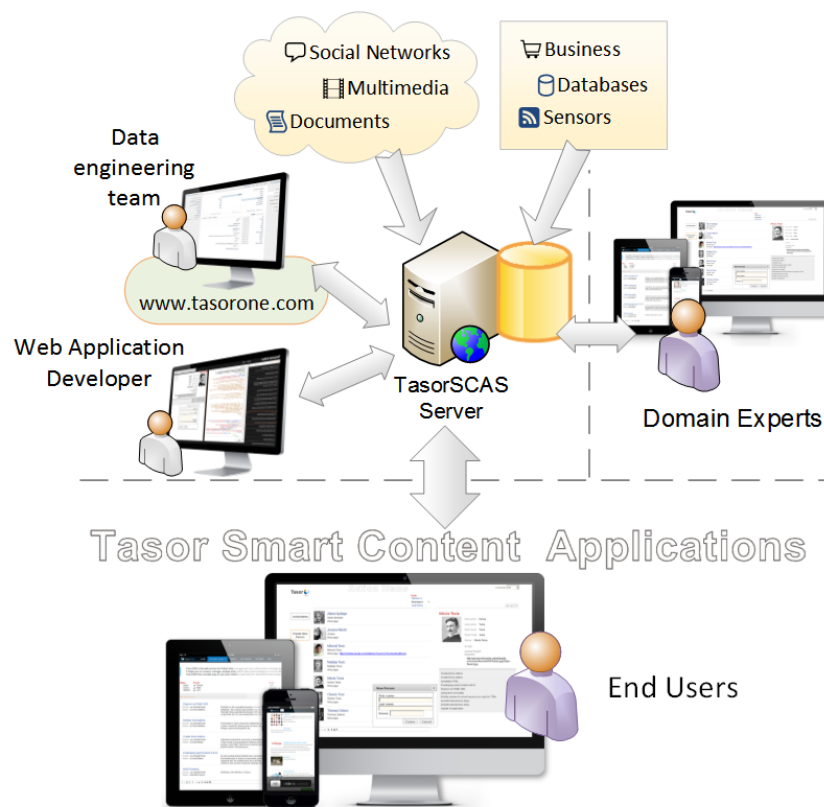# Smart Content Applications

Tasor Smart Content Applications are end-user Web or mobile applications that use semantic data organized as Dataspaces stored on a cloud, dedicated, rented or a private server. Dataspaces are conveniently managed within a corresponding TasorONE project on www.tasorone.com, regardless of the data location. You keep your data private or make it open to the public. If you make your application's data public then other users can link to it and use it in their projects. You instantly publish your data as a five-star Linked Open Data. If you keep your data private, user access rights stay under your full control.

Tasor Smart Content Applications are easy to develop by using semantic tags in HTML templates. A Web application developer uses the online web editor to browse existing templates, copy-paste the HTML code, edit the code or use it in a new application. The application consists of the client code only (HTML, CSS and JavaScript) and does not need any additional server side development. You can host the application wherever you want with no additional installation required, because it communicates application data from your TasorONE project. With the same easy you can host the application on your own server, on a cloud instance, or on our shared or dedicated servers.

The smart content in your application consist of the application data and the semantic descriptions stored on the server. Value of the content is increased by making results of semantic reasoning explicit and available to the application users. Semantic information integration and the rapid application development tools make the platform ideal for solutions dealing with large amount of heterogeneous data.

The Tasor Smart Content application typical development life cycle:

1. Use your TasorONE.com project to develop the application domain ontology – usually existing standard ontologies are included into the project as Dataspaces. Then, team members create new statements to adjust the knowledge to the specifics of the application.

2. Manage work on your project - The project members can reuse existing knowledge by importing ontologies from a predefined set of Dataspaces. They can invite new project members and manage access rights. SPARQL queries can be developed in development environment provided by the TasorONE.com. All of the developed queries are instantly ready to be used in your application.

3. Engage end users – your audience deserves top-quality user interface. TasorSCAS your application with a faceted browsing, a smart search, users' accounts management, access rights, application scaling, security, data synchronization, messaging system and internationalization.

Tasor Smart Content Applications:
- scale with data size end number of users;
- deliver vast amount of data to end users;
- support flexible meta-data and schemas;
- run on any mobile and web device;
- support agile development process;
- can reuse existing data regardless on the data format;
- publish data on the Web compliant to the latest W3C standards;
- feature easy-to-use advanced user interface;
- empower intelligent data analytics;
- integrate with social networks.

What is a Dataspace?

Traditional semantic computing applications separate schema definition (terminological data) from instance data (assertional data).

According to the Web standardization organization W3C's standard VoID, a dataset is a collection of data, published and maintained by a single provider, available as RDF, and accessible, for example, through dereferenceable HTTP URIs or a SPARQL endpoint.

Dataspace is a smart content unit corresponding to a dataset that may contain either schema definition or instance data or both.

How to start development?

1) Go to the TasorONE development page: http://dev.tasorone.com/
2) Read the short description
3) Download the ZIP file with the sample application
4) Install the application on your local Web server and start development.
5) The same sample application is running online for your convenience at: http://actionitems.tasorone.com/

Deployment

TasorSCAS is a distributed, scalable, service oriented, application server. Hosting options for Tasor projects are:

1) Use the existing shared TasorONE.com deployment to host projects.
2) Host Tasor projects on our dedicated server.
3) Full private TasorSCAS installation on a customer's premises.

Hosting options for the semantic triplestore are:

1) Use the existing shared TasorONE.com triplestore.
2) Host a triplestore on our dedicated server.
3) Full private installation of a triplestore on a customer's premises.

Data publishing

All data in Tasor are automatically published and interlinked with existing data on the web as Linked Data. If you decide to open your data you instantly get 5-star Linked Open Data. If you opt for retaining full access control on your data we provide simple, yet secure, authorization mechanism that can be easily used or embedded in any existing environment.

Standards compliance

Data access and publishing on TasorSCAS platform is fully compliant with the W3C standards: *https://www.w3.org/wiki/LDP_Implementations*

Data serialization formats are:
RDF (http://www.w3.org/2001/sw/wiki/RDF)
OWL (http://www.w3.org/2001/sw/wiki/OWL)
JSON-LD (http://www.w3.org/2001/sw/wiki/JSON-LD)

Querying data is in compliant with:
SPARQL (http://www.w3.org/2001/sw/wiki/SPARQL)

HTML templates used to visually represent resources are in compliant with:
RDFa (http://www.w3.org/2001/sw/wiki/RDFa)

TasorONE can be used to organize data in compliance with
SKOS (http://www.w3.org/2001/sw/wiki/SKOS)

Account types

The TasorONE has a layered account types scheme optimized for matching users' needs:

- ❖ *Free* – Any registered user can create one or more free projects. A free project is granted system resources that should be enough for development of a small to moderate size ontology by a team of few domain experts. A free project is by definition public - the project as well as all the work done on the project is visible to general public. A free project is limited on the number of triplets in the project's WDS (Working Data Space is actually set of resources and triplets created on the project), has limits in the file size and number of ontologies that can be imported in the system, and has limited request rate.

- ❖ *Professional* – Monthly or annual subscription. Projects may be configured either public or private. A private project and its WDS are visible only to the project members. Request quotas upgrades are available on a pay-as-you-go basis.

- ❖ *Enterprise* – This is a license for a full system installation. It includes system management console and development tools. No constraints about deployment choices. Full system scalability is provided.

The triplestore service for semantic data storage can be shared or dedicated. Projects with the shared storage have storage limits. The dedicated storage may be provided on our dedicated servers or on The triplestore service (Tasor rdfStore or any other SPARQL 1.1 compliant endpoint) can be privately hosted on users premises for retaining full control on the data. We provide easy to install web application implementing the Tasor rdfStore service for seamless adoption. The TasorONE project with a triplesotre located on the users' server doesn't have limits on the number of triplets or limits on the size of imported ontologies.