

The PARTHENOS Services

The architects of the PARTHENOS infrastructure have analyzed the requirements coming from the PARTHENOS community and in response have designed a set of services.

These services can be divided into two broad categories:

- general services providing cross-community functionality
- specific services providing domain-specific functionality.

General Services: Registering people, services, data, metadata and software

- Manual registration of an entity in the Parthenos registry
- A research infra joins Parthenos and integrate its registry

General Services: Accessing entities registered in Parthenos

- Search and browse the Parthenos registry
- Search and browse the Parthenos content cloud across several research infrastructures
- Retrieval/access metadata about an entity of the Parthenos registry or a resource in the Parthenos content cloud
- Retrieval/access of resources from the Parthenos content cloud

General Services: Setting up Virtual Research Environments

- Set-up of a domain-specific VRE
- Integration of services in the Parthenos infrastructure
- VRE authentication and authorization

General Services: Using Virtual Research Environments

- Communication between users within VRE
- Reference entities of the Parthenos registry or resources of the Parthenos content cloud in VRE posts
- Deposition
- Private and public sharing of resources deposited in the VRE workspace
- Process a dataset and publish results

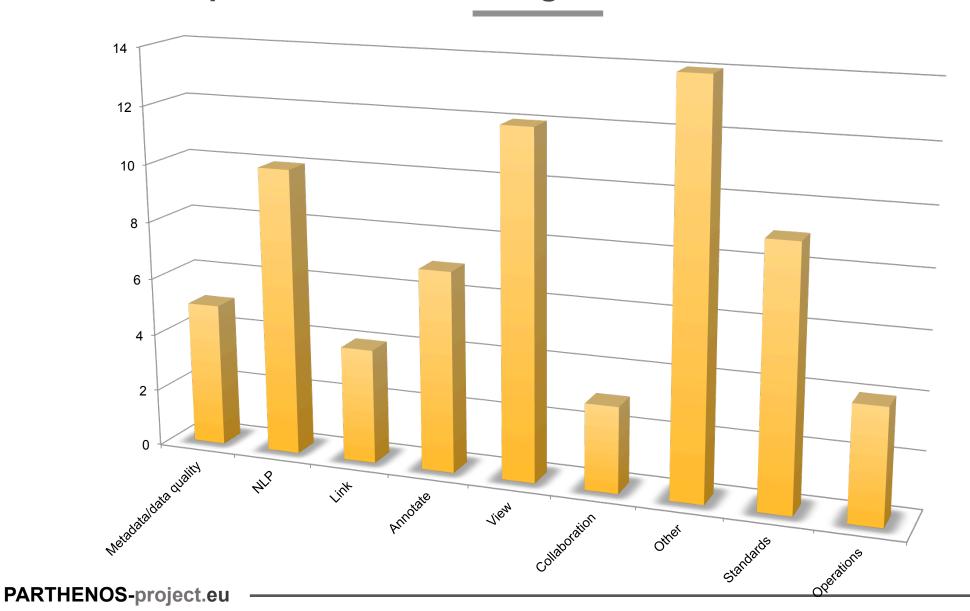
General Services: Aggregating and exporting metadata from RIs

- Aggregate resource metadata from research infrastructures into the Parthenos content cloud
- Export metadata via standard protocols

General Services: Curating PARTHENOSresources

- Subject coverage
- Invite new content providers
- Invite curation
- Deduplication
- Quality control of Infrastructure
- Check of availability of services

Specific Services: Categorization of services



The whole path

Preconditions (covered by PARTHENOS infrastructure (PI) use cases):

- 1. Metadata for resources (and services) harvested from CLARIN and available/indexed within PI (JRR) (PIUC: 8, 2 5)
- 2. dedicated VRE set up (PIUC 12)

Usage phase:

- **1.** .discover search for language resources by different filters
- 2. .compute./analyze send result of search to a processing service (e.g. NER / Entity Linking)
- **3. .deposit/.describe** store the result of the processing as new resource, register in JRR, add metadata (provenance automatically, descriptive manually)
- 4. .visualize/.explore view original resource + annotation in a dedicated viewer

Use Case: NER & Entity Linking

Persistent Dataset: Historical text from Gutenberg

Vocabulary: dbpedia, geonames, GND

Service: Stanbol

Result: Annotations [JSON-LD]

Store to myWorkspace Content Cloud

Viewer: <u>GeoBrowser</u>

Timing

- D6.1. PARTHENOS cloud infrastructure (initial), due M18 (October 2016)
- D6.2. Report on services and tools (interim), due M24 (May 2017)
- D6.3. Report on the implementation of the Joint Resource Registry, due M30 (October 2017)
- D6.4 Report on services and tools (final), due M45 (January 2018)
- D6.5 Report on the implementation of the Joint Resource Registry (final), due
 M48 (May 2019)
- D6.6 PARTHENOS cloud infrastructure (final), due M48 (May 2019)



