Requirement Specification

Topic: Exploiting Data from Government Data Portals

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1 Functional Requirements

1.1 Import from government portals

- 1.1.1 Description: Get domain data for enterprise information system or users from targeted government portals. The system downloads structured data based on API or web page rules from manually targeted government website URLs or API portals.
- 1.1.2 Priority: High

1.2 Export to enterprise information system

- 1.2.1 Description: Export data to enterprise information system that users can use and analyze. The system exports structured data into enterprise information system such as database/warehouse after function 'import from government portals'
- 1.2.2 Priority: High

1.3 Analyses and comparison

- 1.3.1 Description: Compare features, tools, available data, data reusability etc. for each government portals to offer more public information and analyses for users
- 1.3.2 Priority: Medium

1.4 Modification of portals or domains

- 1.4.1 Description: Enterprise information system can add or modify portal address or specific domains for government portals manually
- 1.4.2 Priority: Low

1.5 Automatic data update

- 1.5.1 Description: After the first time download for initialization, automatic data update from the specific government data portals is available to keep enterprise information system updated
- 1.5.2 Priority: Low

1.6 Mining and visualization

- 1.6.1 Description: Implement data mining and analyses based on the government data and data visualization for user with better comprehension
- 1.6.2 Priority: Low

2 Non-functional Requirements

2.1 Different formats supporting

- 2.1.1 Description: Support different formats from various portals for import e.g. .txt, .csv, .xls, .xml, .json file etc. which depends on specific government data portals that users select
- 2.1.2 Priority: Medium

2.2 Real-time (performance)

- 2.2.1 Description: Real-time update from the government portals, supplying the latest data, news and information on specific domains from governments for enterprise information system and users
- 2.2.2 Priority: Low

2.3 Robustness to portals (reliability, availability and maintainability)

- 2.3.1 Description: Check out downloading efficiency, data correctness and completeness and detect whether portals or APIs have been modified or not
- 2.3.2 Priority: Low