SWDB Configuration

The primary configuration file for the SWDB application is founds as config/properties.json. It lists a number of important categories of information for adapting the application to a given environment. These include the following.
- DB back-end references used by the system.
- Links to external resources (such as CCDB) that are required for operation can be found.
- Internal and external URL prefixes to be presented by the system are listed.
- Enumerated types are configured here.

The following table describes the properties in more detail.

Type	Property	Description
Enumeration	levelOfCareEnums	Lists the available levels of care. This list is formatted as a JSON array. For example. ["NONE","LOW","MEDIUM","HIGH","SAFETY"]
	statusEnums	Lists the status levels software may be assigned. This is formatted as a JSON array. For example. ["DEVEL","RDY_INSTALL","RDY_INT_TEST","RDY_BEAM","RETIRED"]
	instStatusEnums	Lists the status levels installations may be assigned. These values are listed as a JSON array. For example. ["DEVEL","MAINT","RDY_INSTALL","RDY_INT_TEST","RDY_BEAM","DEPRECATED","STANDBY"]
	rcsEnums	Identifies the options for software configuration management types. The types are listed as a JSON array. For example. ["Git","AssetCentre","Filesystem","Other"]
	areaEnums	Sets the available installation areas. For example. ["Global","FE","LS1","FS1","LS2","FS2","LS3","BDS","FS"]
External services	ccdbApiUrl	This parameter sets the location of the top level CCDB API.
	slotsDataSource	These items are listed as a JSON object with at least two parts. 1) useSource is set to the name of the parameter to be made active. 2) The name and location of the slots information. For example. { "useSource": "production", "production":"http://controls.frib.msu.edu/ccdbapi/slot" }
	mongodbUrl	This is the locator to reach the back-end database to use.
	auth	The location of the CAS authentication service and the authentication landing points in CAS logins. The auth entry is

		written as a JSON object. For example.
		{
		  "cas": "https://cas.nscl.msu.edu",
		  "service": "swdb-dev:4005",
		  "login_service": "http://swdb-dev:4005/caslogin"
		  }

Internal and external prefixes	apiUrl	The URL where the software API tree starts is found here.
	instApiUrl	The installation API tree is listed with this parameter.
	restPort	The API port number where API are hosted.
	webUrl	The location of the web application.
	webUrlProxy	The location of the proxy for the web application. This can be useful for setting the location of an external web proxy.
	webPort	The port of the web application.

	CORS	Written as a JSON object. These entries are cross-origin access controls. For example.
		  "CORS": {
		   // set CORS headers
		   "origin": "*",
		   "methods": "POST, GET, PUT, DELETE, OPTIONS, PATCH",
		   "headers": "Origin, X-Requested-With, Content-Type, Accept"
		   }

	sslKey	The file path and name of the ssl key file.
	sslCrt	The file path and name of the ssh crt file.

	Test	The test settings and location of test data files to be loaded before the test suites. Written as a JSON object. For example:
		  "test": {
		   "testing": "true", // Flag for disabling connections to outer services
		   "username": "testuser", // the user for testing
		   "password": "pas5w0rd", // the password for the test user
		   "swTestDataFile": "/home/deployer/swdb/src/apptest/misc/datafiles/swTestDataCombined.json",
		   "instTestDataFile": "/home/deployer/swdb/src/apptest/misc/datafiles/instTestDataCombined.json"
		   }

Taken together, a properties file might look something like this.

```
{
// This file configures SWDB
//
  "levelOfCareEnums": ["NONE","LOW","MEDIUM","HIGH","SAFETY"],
  "statusEnums": ["DEVEL","RDY_INSTALL","RDY_INT_TEST","RDY_BEAM","RETIRED"],
  "instStatusEnums": ["DEVEL","MAINT","RDY_INSTALL","RDY_INT_TEST","RDY_BEAM","DEPRECATED","STANDBY"],
  "rcsEnums": ["Git","AssetCentre","Filesystem","Other"],
  "areaEnums": ["Global","FE","LS1","FS1","LS2","FS2","LS3","BDS","FS"],
  "apiUrl":"https://swdb-dev:3000/api/v1/swdb/",
  "instApiUrl":"https://swdb-dev:3000/api/v1/inst/",
  "ccdbApiUrl":"http://controls.frib.msu.edu/ccdbapi/",
  "slotsDataSource":{
    "useSource": "test",
    "test":"/home/deployer/swdb/src/apptest/misc/datafiles/slotsTestData.json",
    "production":"http://controls.frib.msu.edu/ccdbapi/slot"
  },
  "restPort":"3000",
  "webUrl":"https://swdb-dev:3000/",
  "webUrlProxy":"https://swdb-dev:3000/",
  "webPort":"3000",
  "mongodbUrl":"mongodb://swdb:password@swdb-dev:27017/swdb-dev?authSource=swdb-dev&ssl=true&sslValidate=false",
  "sslKey": "/home/deployer/swdb/config/server.key",
  "sslCrt": "/home/deployer/swdb/config/server.crt",
  "auth":{
    "cas": "https://cas.nscl.msu.edu",
    "service": "swdb-dev:3000",
    "login_service": "https://swdb-dev:3000/caslogin"
  },
  "CORS": {
    // set CORS headers
    "origin": "*",
    "methods": "POST, GET, PUT, DELETE, OPTIONS, PATCH",
    "headers": "Origin, X-Requested-With, Content-Type, Accept"
  },
  "test": {
    "swTestDataFile": "/home/deployer/swdb/src/apptest/misc/datafiles/swTestDataCombined.json",
    "instTestDataFile": "/home/deployer/swdb/src/apptest/misc/datafiles/instTestDataCombined.json"
  }
}
```

For more information see the JSON specification http://www.json.org/ and the rc module for formatted JSON https://www.npmjs.com/package/rc .