



VocBench Getting Started

Installation and First Thesaurus

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By the end of this workshop you can install and run VocBench on your machine and build a simple thesaurus

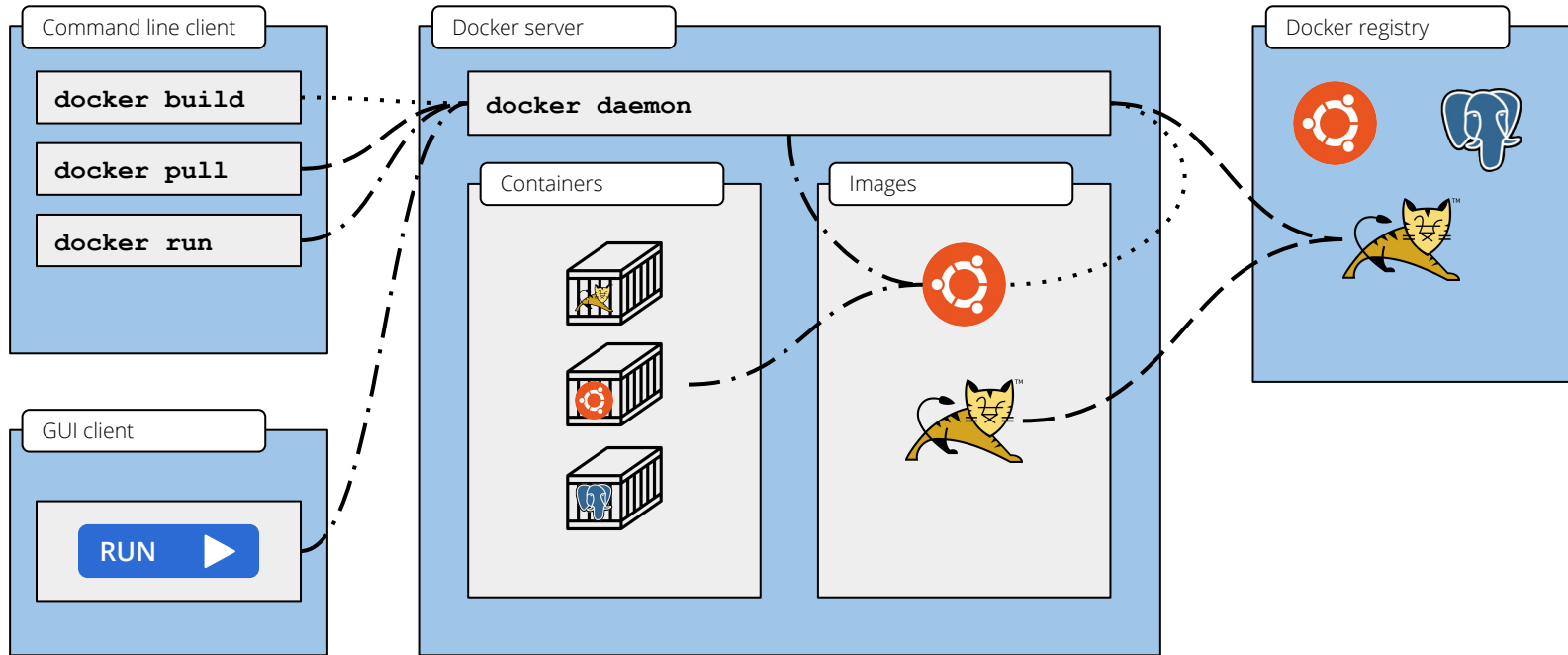
VocBench

- Web-based collaboration tool for management of taxonomies, thesauri and ontologies based on W3C linked data standards such as SKOS and OWL
- Ensures consistency and enables collaboration
- Designed for maintainers, but there are many use cases
- Used when authoring, browsing and retrieving concepts
- Browser-based client with separate server and storage components
- Run on your own servers or use any of the cloud providers

Docker

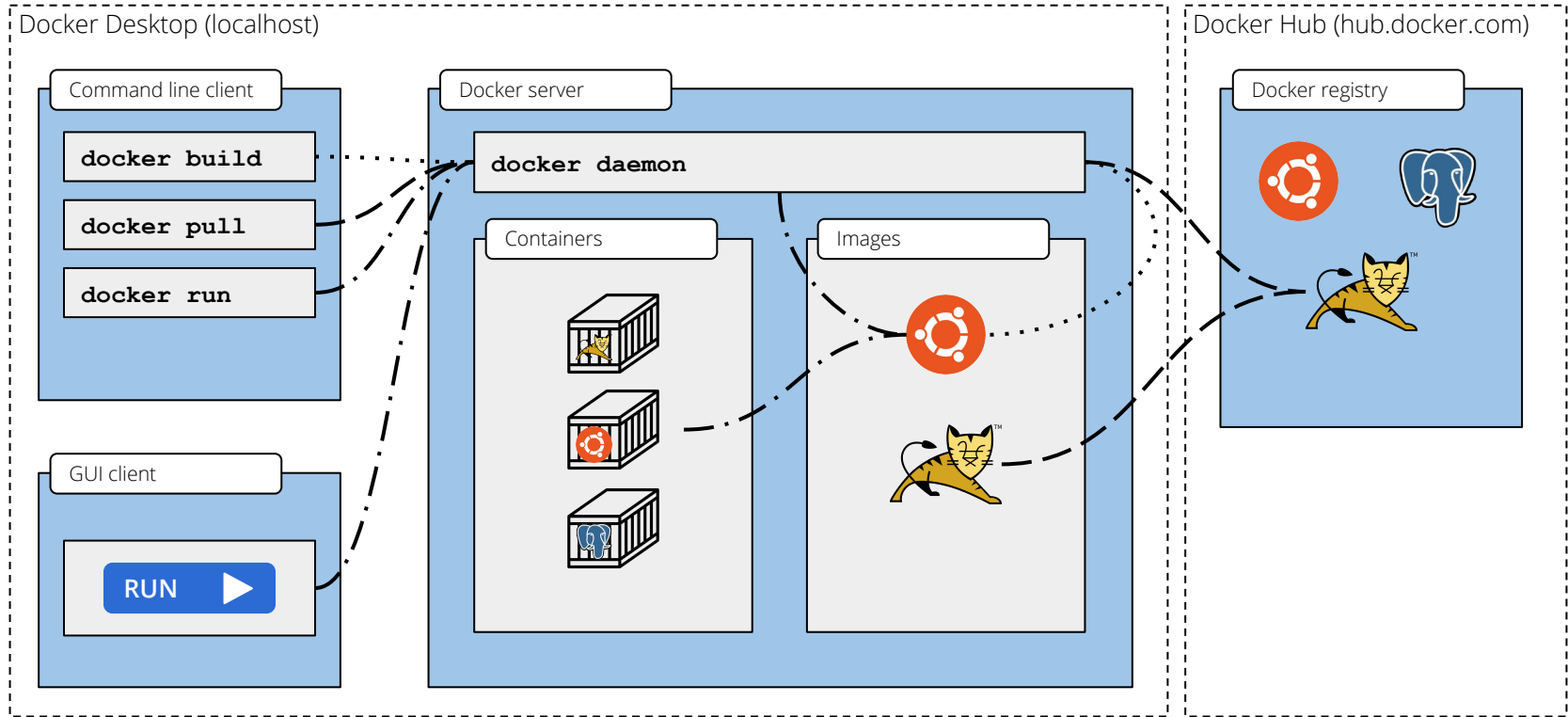
- Platform for developing, shipping, and running applications
- Ensures isolation of applications from each other and infrastructure to streamline development and deployment
- Designed for developers and operations users
- Use it when packaging and deploying applications

Just Enough Docker Architecture



More info: <https://docs.docker.com/get-started/overview/>

Just Enough Docker Architecture



More info: <https://docs.docker.com/get-started/overview/>

Step 1 - Pulling VocBench Image (1/2)

The screenshot displays the Docker Desktop interface for managing images on disk. The top navigation bar includes the Docker logo, settings, a refresh icon, and a 'Sign in' button. The main content area is titled 'Images on disk' and shows '0 images' with a 'Total size: 0 Bytes'. A progress bar indicates 'IN USE' and 'UNUSED' space, with a 'Clean up...' button. Below this, there are tabs for 'LOCAL' (selected) and 'REMOTE REPOSITORIES'. A search bar and a 'Sort by' dropdown are present. A table with columns 'TAG', 'IMAGE ID', 'CREATED', and 'SIZE' is shown but is currently empty. At the bottom, the 'Connect to Remote Content' section shows a 'Not connected' status and a 'Sign in' button. The bottom status bar indicates 'Docker running'.

Containers / Apps
Images

Images on disk 0 images Total size: 0 Bytes IN USE UNUSED Clean up...

LOCAL REMOTE REPOSITORIES

Search Sort by

TAG	IMAGE ID	CREATED	SIZE
-----	----------	---------	------

Connect to Remote Content Not connected

- ✓ Store things remotely
- ✓ Collaborate with your team
- ✓ Backup your content remotely
- ✓ It's free

Sign in

● Docker running

Step 1 - Pulling VocBench Image (1/2)

```
Command Prompt
Microsoft Windows [Version 10.0.19042.685]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\    >docker pull cadmiumkitty/vocbench3
Using default tag: latest
latest: Pulling from cadmiumkitty/vocbench3
6c33745f49b4: Pull complete
ef072fc32a84: Pull complete
c0afb8e68e0b: Pull complete
d599c07d28e6: Pull complete
e8a829023b97: Pull complete
2709df21cc5c: Pull complete
3bfb431a8cf5: Pull complete
091200634aa7: Pull complete
6b374af2a580: Pull complete
Digest: sha256:607db83c583d25940e3bda732d6c93f933d6177e34afa9b03f9a685f5a11ef9b
Status: Downloaded newer image for cadmiumkitty/vocbench3:latest
docker.io/cadmiumkitty/vocbench3:latest

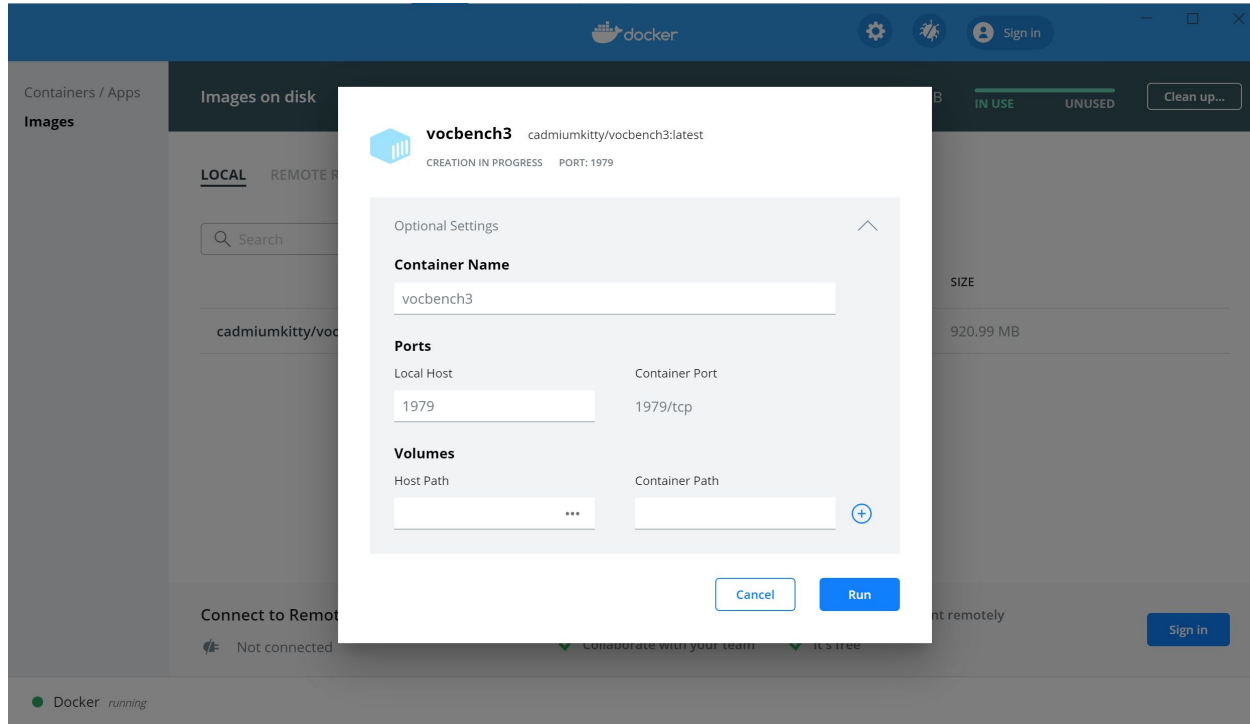
C:\Users\    >
```


Step 2 - Running VocBench Container (1/4)

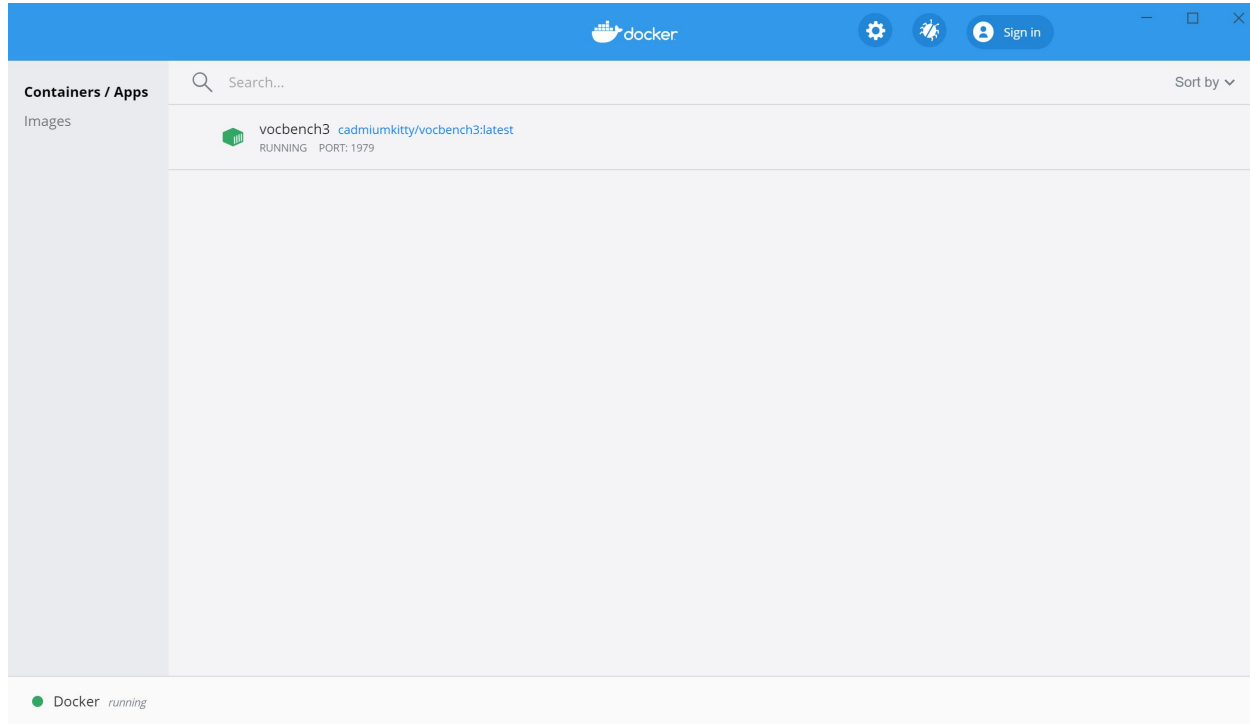
The screenshot shows the Docker Desktop interface. The top bar is blue with the Docker logo and a 'Sign in' button. Below the bar, the left sidebar shows 'Containers / Apps' and 'Images'. The main area is titled 'Images on disk' and shows '1 images' with a total size of '920.99 MB'. A progress bar indicates 'IN USE' and 'UNUSED' space, with a 'Clean up...' button. The 'LOCAL' tab is selected, showing a search bar and a 'Sort by' dropdown. A table lists the image 'cadmiumkitty/vocbench3' with tag 'latest', image ID 'db03c1abb5d8', created '28 minutes ago', and size '920.99 MB'. A 'RUN' button is next to the image. At the bottom, there is a 'Connect to Remote Content' section with a status of 'Not connected' and a 'Sign in' button. The bottom status bar shows 'Docker running'.

TAG	IMAGE ID	CREATED	SIZE	
cadmiumkitty/vocbench3	latest	db03c1abb5d8	28 minutes ago	920.99 MB

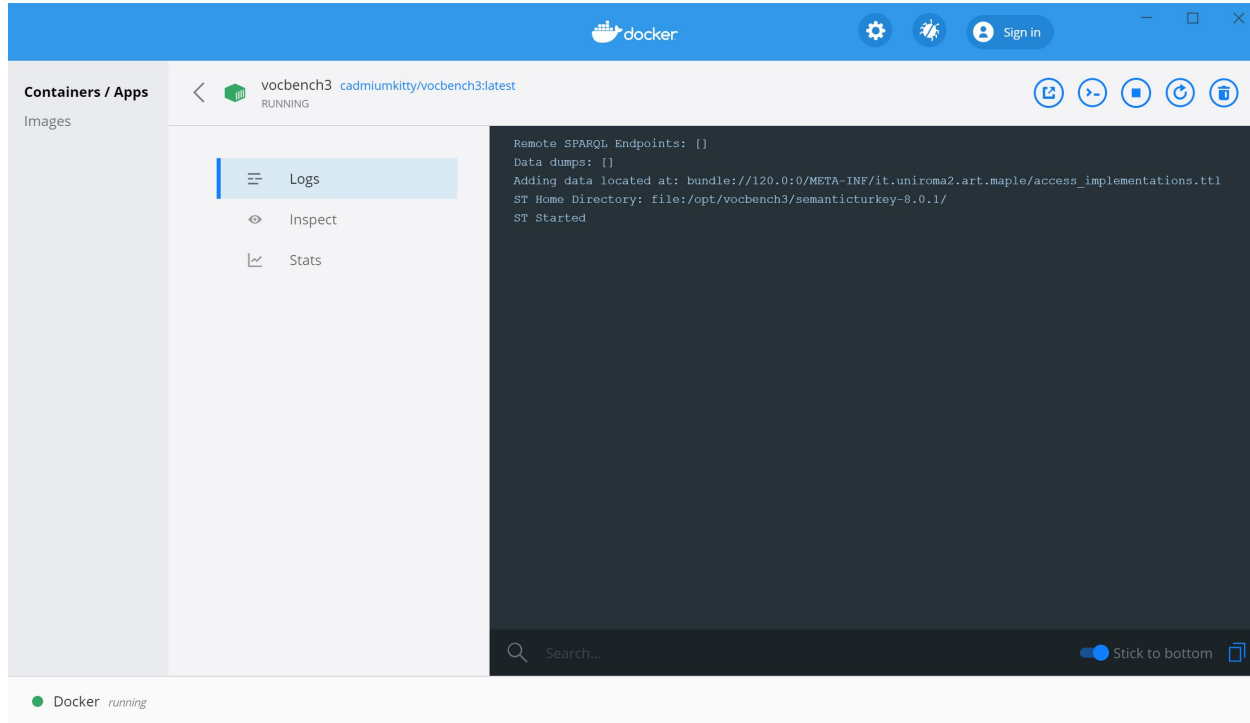
Step 2 - Running VocBench Container (2/4)



Step 2 - Running VocBench Container (3/4)



Step 2 - Running VocBench Container (4/4)



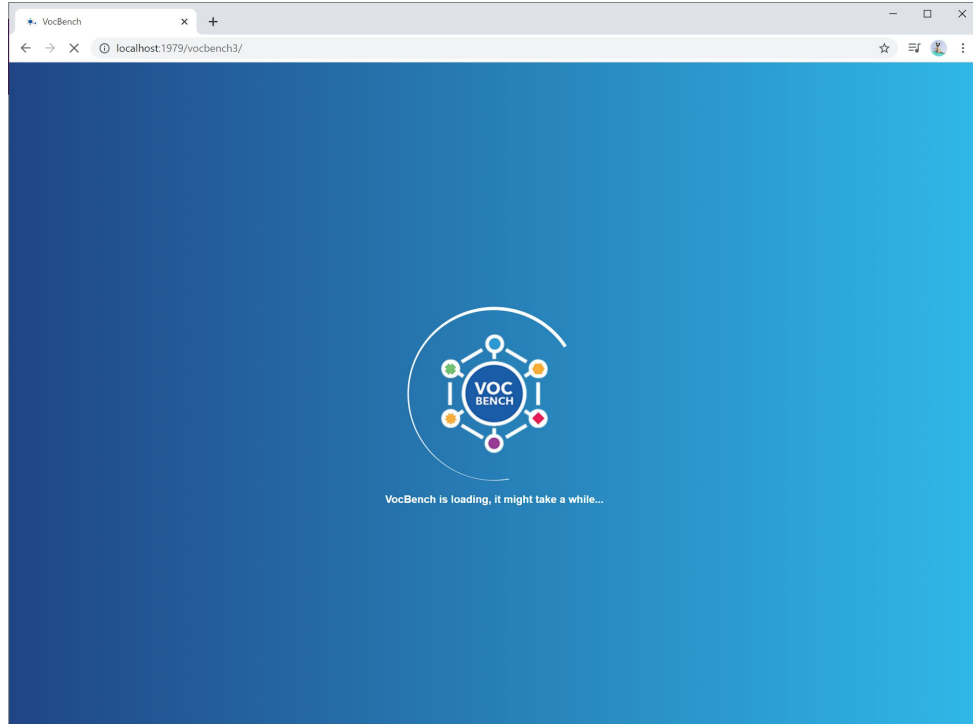
The screenshot displays the Docker Desktop interface for a running container named 'vocbench3'. The container is using the image 'cadmiumkitty/vocbench3:latest' and is in a 'RUNNING' state. The interface shows the following details:

- Containers / Apps:** vocbench3 (cadmiumkitty/vocbench3:latest) RUNNING
- Actions:** Logs, Inspect, Stats
- Logs:**

```
Remote SPARQL Endpoints: []
Data dumps: []
Adding data located at: bundle:///120.0:0/META-INF/it.uniroma2.art.maple/access_implementations.ttl
ST Home Directory: file:/opt/vocbench3/semanticturkey-8.0.1/
ST Started
```

The Docker Desktop status bar at the bottom indicates 'Docker running'.

Step 3 - Setting Up VocBench (1/5)



Step 3 - Setting Up VocBench (1/5)

VocBench

localhost:1979/vocbench3/#/Registration/1

VocBench

User registration:

VocBench found no registered user. In order to use the platform, you need to create an administrator account by entering personal data and login credentials. A pre-defined user (username: admin@vocbench.com, password: admin) is available for letting those willing to use VocBench as a simple desktop tool and skip the user creation procedure. [Fill pre-defined user](#)

E-mail: * admin@vocbench.com

Password: * [masked] **Confirm password:** * [masked]

Given name: * Admin

Family name: * Admin

Office address: Office address

Phone: Phone

Affiliation: Affiliation

Personal URL: Personal URL

User IRI: User IRI

Avatar URL: Avatar URL

Language proficiencies: ** Language proficiencies

* Mandatory field
** Optional but highly recommended field

Submit

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Step 3 - Setting Up VocBench (1/5)

The screenshot shows the VocBench registration interface. A modal dialog titled "Language proficiencies" is open, displaying a list of languages with checkboxes for selection. The "en-GB" option is selected. The background shows the registration form with fields for email, password, name, address, phone, and affiliation. A "Submit" button is visible at the bottom right of the form.

Selected	ISO code	Language
<input type="checkbox"/>	ar	Arabic
<input type="checkbox"/>	bg	Bulgarian
<input type="checkbox"/>	bn	Bengali
<input type="checkbox"/>	bs	Bosnian
<input type="checkbox"/>	ca	Catalan
<input type="checkbox"/>	cs	Czech
<input type="checkbox"/>	da	Danish
<input type="checkbox"/>	de	German
<input type="checkbox"/>	el	Greek
<input type="checkbox"/>	en	English
<input checked="" type="checkbox"/>	en-GB	British English
<input type="checkbox"/>	en-US	American English
<input type="checkbox"/>	es	Spanish
<input type="checkbox"/>	et	Estonian
<input type="checkbox"/>	fa	Persian
<input type="checkbox"/>	fi	Finnish
<input type="checkbox"/>	fj	Fijian
<input type="checkbox"/>	fr	French
<input type="checkbox"/>	ga	Irish
<input type="checkbox"/>	hi	Hindi
<input type="checkbox"/>	hr	Croatian
<input type="checkbox"/>	hu	Hungarian
<input type="checkbox"/>	id	Indonesian
<input type="checkbox"/>	is	Icelandic
<input type="checkbox"/>	it	Italian
<input type="checkbox"/>	ja	Japanese
<input type="checkbox"/>	ka	Georgian
<input type="checkbox"/>	km	Khmer
<input type="checkbox"/>	ko	Korean
<input type="checkbox"/>	la	Latin

Step 3 - Setting Up VocBench (1/5)

The screenshot shows the VocBench configuration page in a web browser. The browser address bar shows the URL `localhost:1979/vocbench3/#/Sysconfig`. The page title is "VocBench" and the breadcrumb is "Projects".

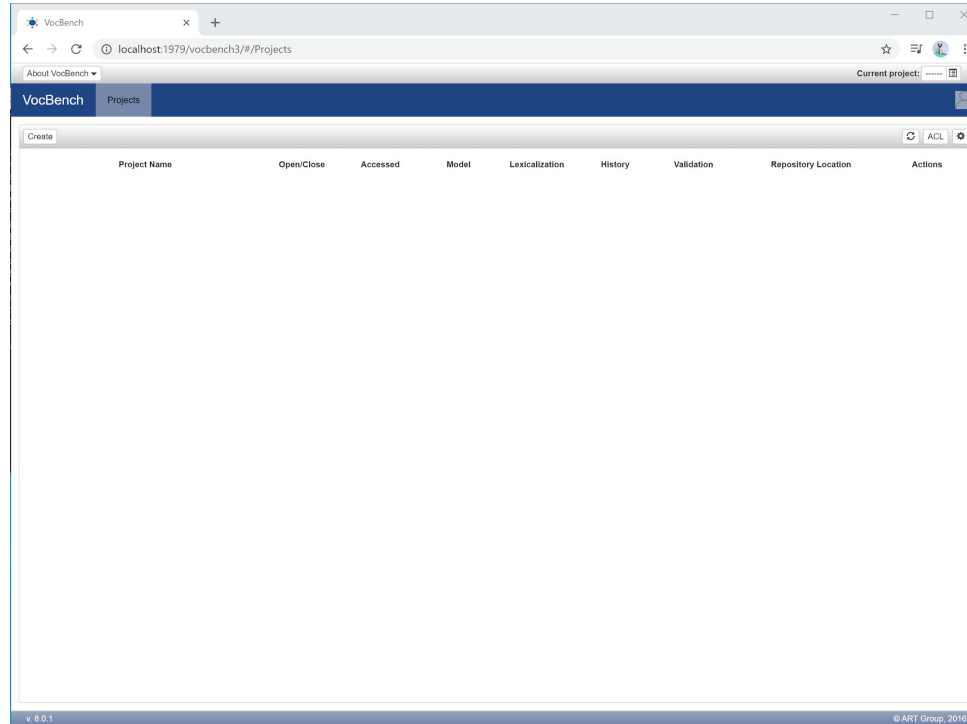
The main content area is titled "In this section you can setup some core aspects of the system. This panel can be accessed also later from Administration > Configuration (located in the user menu)".

The configuration is organized into several sections:

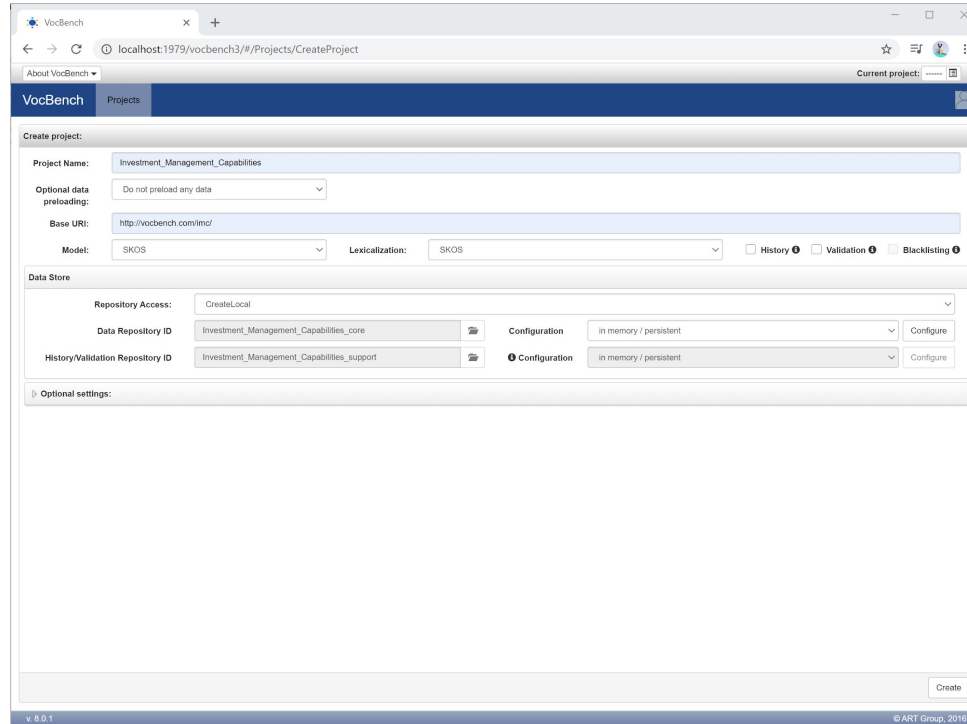
- Semantic Turkey data folder:** `./data/SemanticTurkeyData` (Update)
- Preload profiler threshold:** (bytes) (Update)
- Vocbench Email Configuration:**
 - Configuration of the VocBench e-mail service. This service will be used to send notifications to the system administrator and to the users.
 - Mail SMTP host:** `smtp.gmail.com`
 - Mail SMTP port:** `465`
 - Cryptographic protocol:** `SSL`
 - Authentication:** true false
 - Mail from address:** `xxxx@gmail.com`
 - Mail from password:** `****`
 - Mail from alias:** `System Admin`
 - Buttons: Test, Submit
- Notification scheduler:**
 - Configuration of the VocBench e-mail notification service. The system will send a notifications daily digest to the users who have chosen the Email daily digest as notification mode.
 - Hour of the day:** (dropdown)
 - Time zone:** (dropdown) (Detect)
 - Buttons: Submit, Disable
- Registration form fields:** (dropdown)

At the bottom right, there is a "Done" button. The footer shows "v. 0.0.1" and "© ART Group, 2016".

Step 3 - Setting Up VocBench (1/5)



Step 4 - Creating First Project (1/2)



The screenshot shows the VocBench web interface for creating a new project. The browser address bar indicates the URL is localhost:1979/vocbench3/#/Projects/CreateProject. The page title is 'VocBench' and the current project is empty.

Create project:

Project Name: Investment_Management_Capabilities

Optional data preloading: Do not preload any data

Base URI: http://vocbench.com/impl/

Model: SKOS **Lexicalization:** SKOS History Validation Blacklisting

Data Store

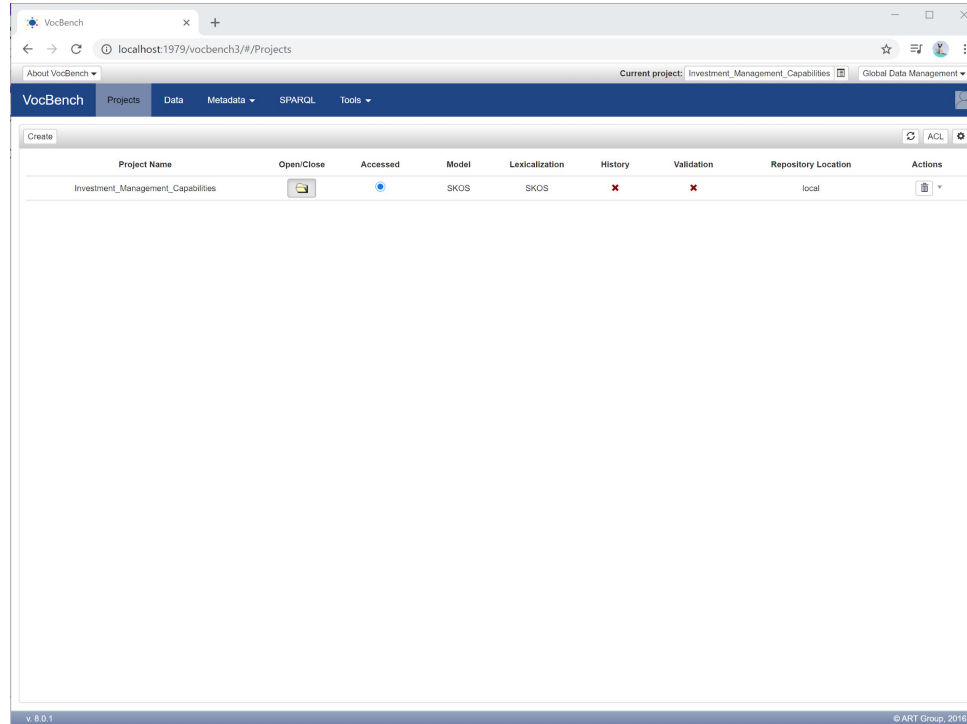
Repository Access:	Data Repository ID	Configuration
CreateLocal	Investment_Management_Capabilities_core	in memory / persistent
	Investment_Management_Capabilities_support	in memory / persistent

Optional settings:






Create

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Step 4 - Creating First Project (2/2)

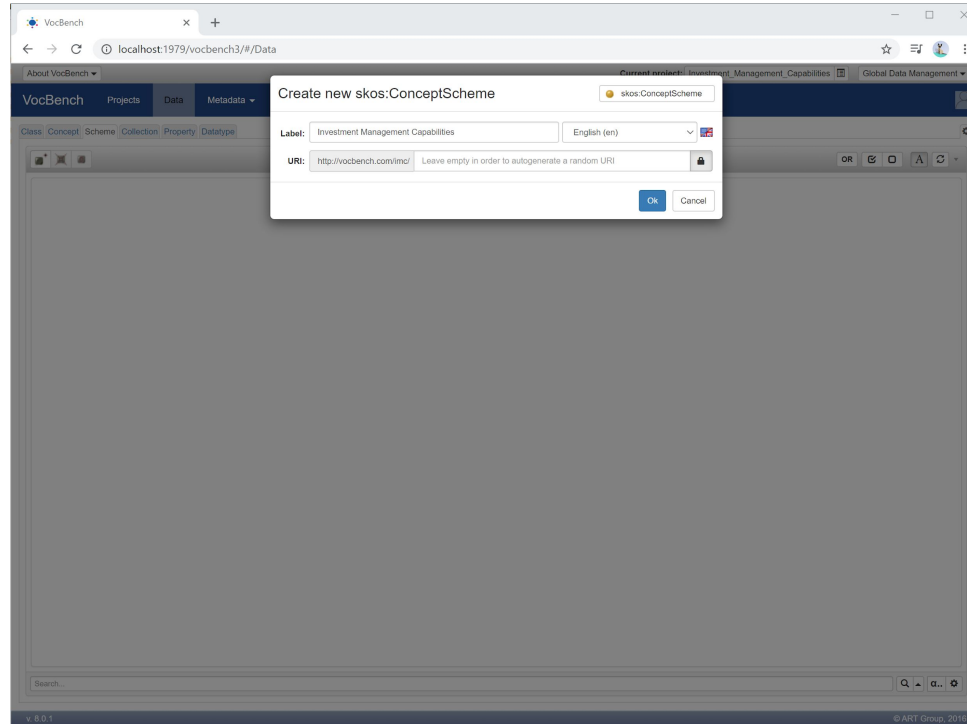


The screenshot shows the VocBench web application interface. The browser address bar displays 'localhost:1979/vocbench3/#/Projects'. The current project is 'Investment_Management_Capabilities'. The interface includes a navigation menu with 'Projects', 'Data', 'Metadata', 'SPARQL', and 'Tools'. A 'Create' button is visible in the top right corner. Below the navigation, there is a table with the following columns: Project Name, Open/Close, Accessed, Model, Lexicalization, History, Validation, Repository Location, and Actions. The table contains one row for the project 'Investment_Management_Capabilities'.

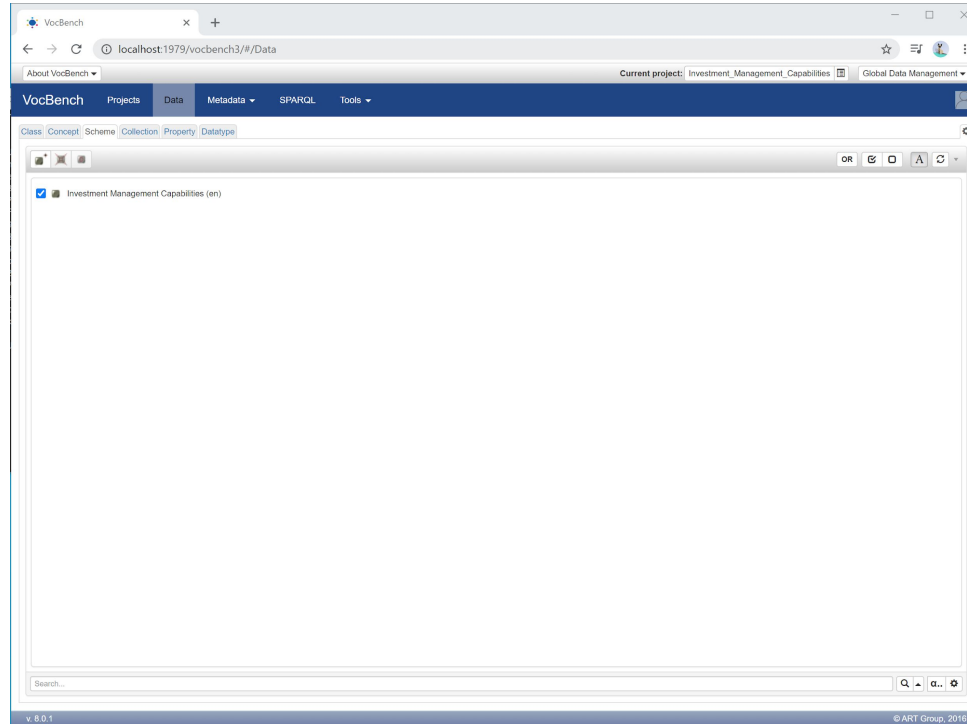
Project Name	Open/Close	Accessed	Model	Lexicalization	History	Validation	Repository Location	Actions
Investment_Management_Capabilities			SKOS	SKOS			local	

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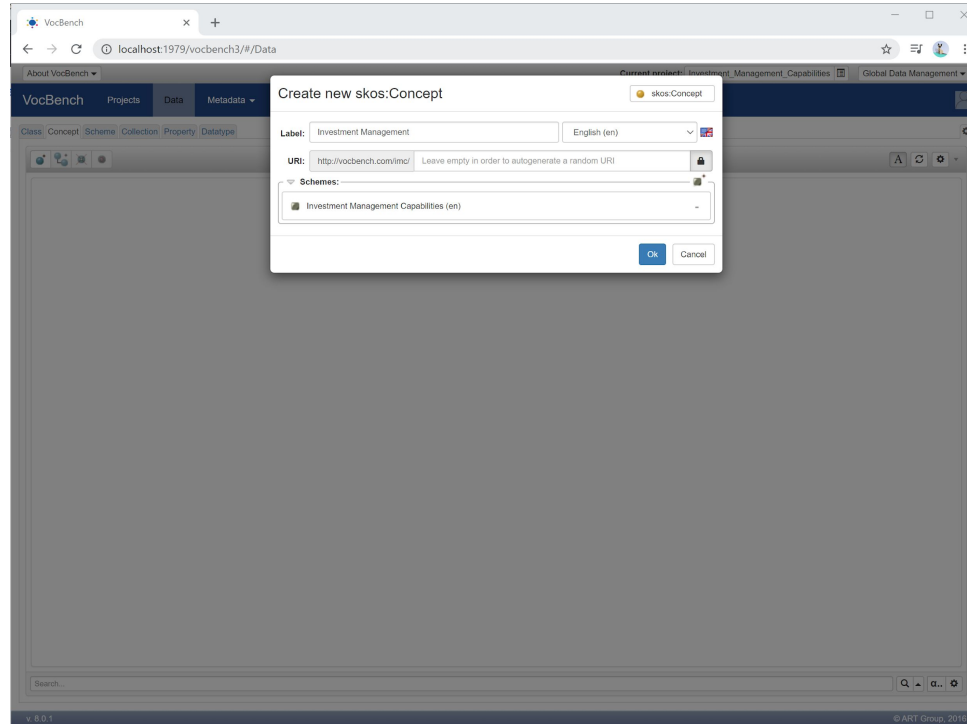
Step 5 - Creating Concept Scheme (1/2)



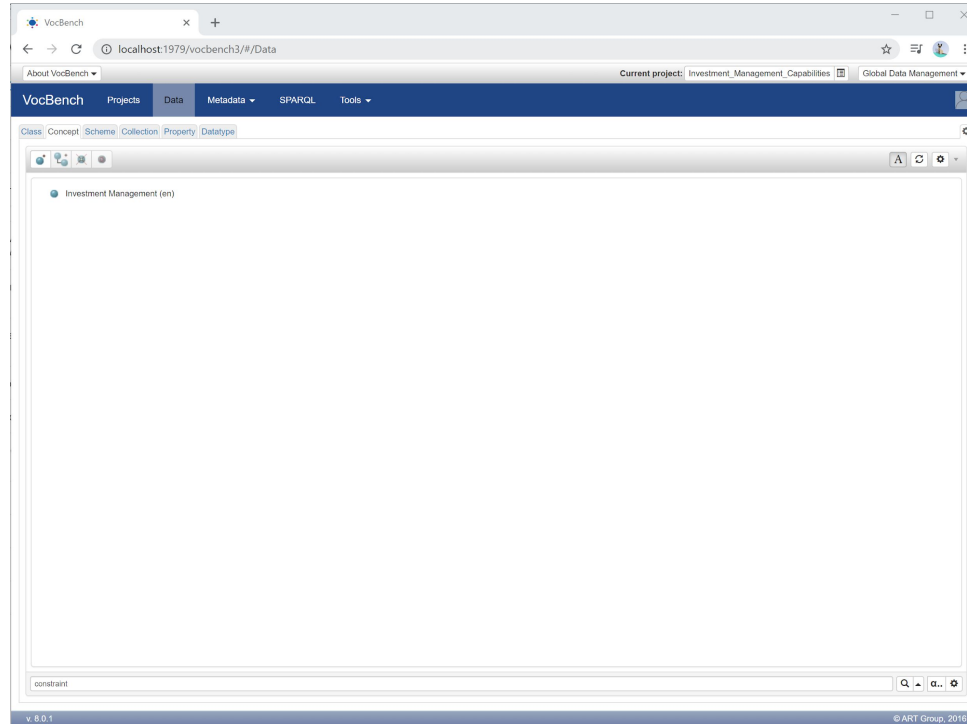
Step 5 - Creating Concept Scheme (2/2)



Step 5 - Creating Top Concept (1/3)



Step 5 - Creating Top Concept (2/3)



Step 5 - Creating Top Concept (3/3)

The screenshot displays the VocBench web interface for configuring a concept. The browser address bar shows the URL `localhost:1979/vocbench3/#/Data`. The current project is `Investment_Management_Capabilities`. The interface is divided into several sections:

- Left Panel:** A list of classes, with `Investment Management (en)` selected.
- Right Panel:** Configuration options for the selected concept, including:
 - Types:** `rdf:type` is set to `skos:Concept`.
 - Top Concept of:** `skos:topConceptOf` is set to `Investment Management Capabilities (en)`.
 - Schemes:** `skos:inScheme` is set to `Investment Management Capabilities (en)`.
 - Broaders:** This section is currently empty.
 - Lexicalizations:** `skos:prefLabel` is set to `Investment Management`.
 - Notes:** This section is currently empty.
 - Other properties:** This section is currently empty.

At the bottom of the interface, there are tabs for `Res/View`, `Term/View`, and `Code`. The status bar at the bottom indicates the version `v. 0.0.1` and the copyright `© ART Group, 2016`.

Possible Next Topics

- Docker setup troubleshooting
- Creating and managing concepts
- SPARQL Queries
- Importing data
- Validation
- Reporting
- Graph visualization
- SKOS Collections