

# NDS Labs - Developer Support

- [Sign-Up / Sign-In](#)
- [Dashboard](#)
  - [Dashboard w/ External File Manager \(i.e. Cloud9\)](#)
  - [Integrated File Manager \(Optional\)](#)
- [Environments \(DevEnvs\)](#)
  - [Open Environment Instance](#)
    - [Cloud9 IDE](#)
    - [VS Code](#)
    - [Jupyter](#)
    - [Rstudio](#)
    - [Other Options](#)
      - [Fiddles](#)
    - [Non-Options](#)
      - [Non-IDEs](#)
      - [Extinct \(Dead Links\)](#)
      - [Cloud-Only Models](#)
  - [View Environment Instances](#)
  - [Create new Environment Instance](#)
  - [Configure Environment Instance](#)
- [Applications \(Stacks\)](#)
  - [View Applications](#)
    - [Stopped Applications](#)
    - [Running Applications](#)
  - [Launch Stopped Application \(Start Stack\)](#)
  - [Shutdown Running Application \(Stop Stack\)](#)
  - [Configure \(New Application / Edit Stopped Application\)](#)
- [Catalog](#)
  - [View Catalog Entries](#)
  - [Create / Edit Catalog Entries](#)
  - [Export Catalog Entry \(Share\)](#)
  - [Import Catalog Entry](#)
- [Historical](#)

## Sign-Up / Sign-In

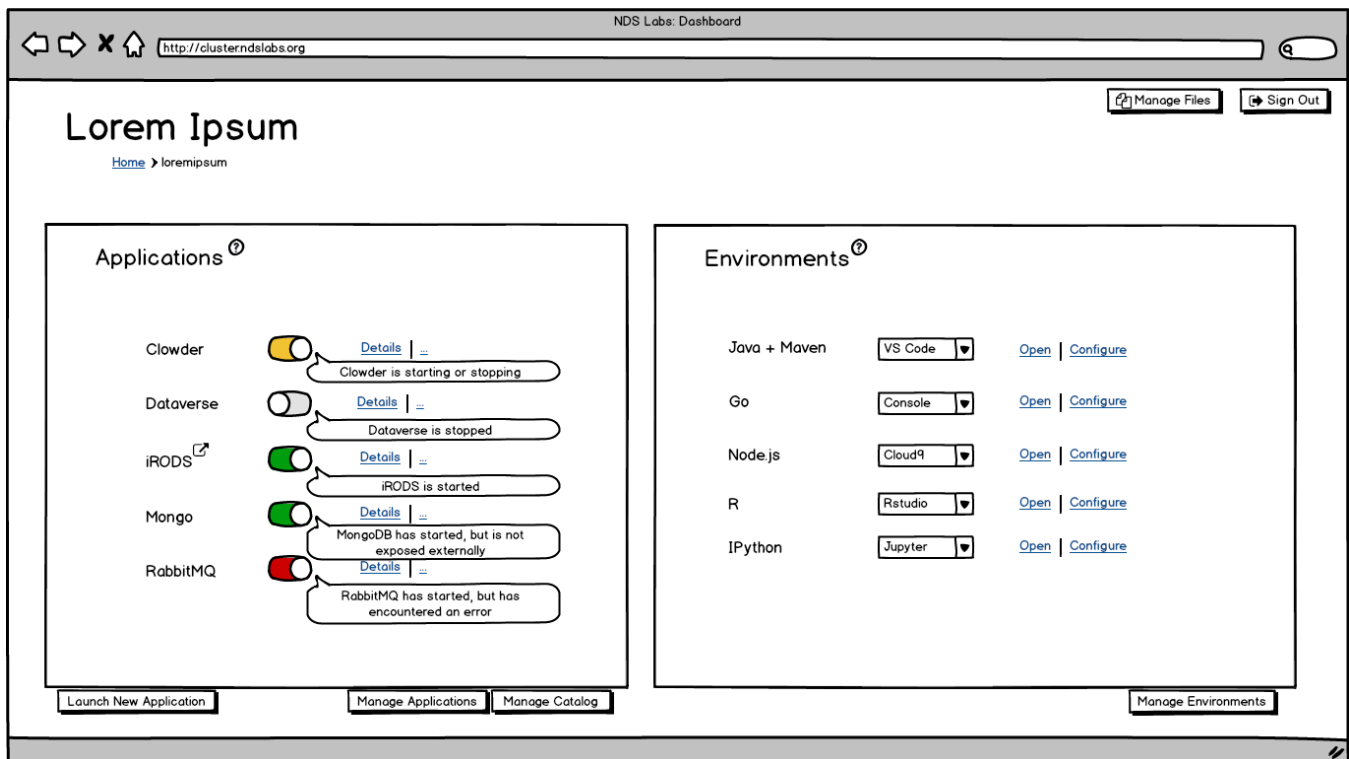
See [Developer support in NDS Labs](#)

## Dashboard

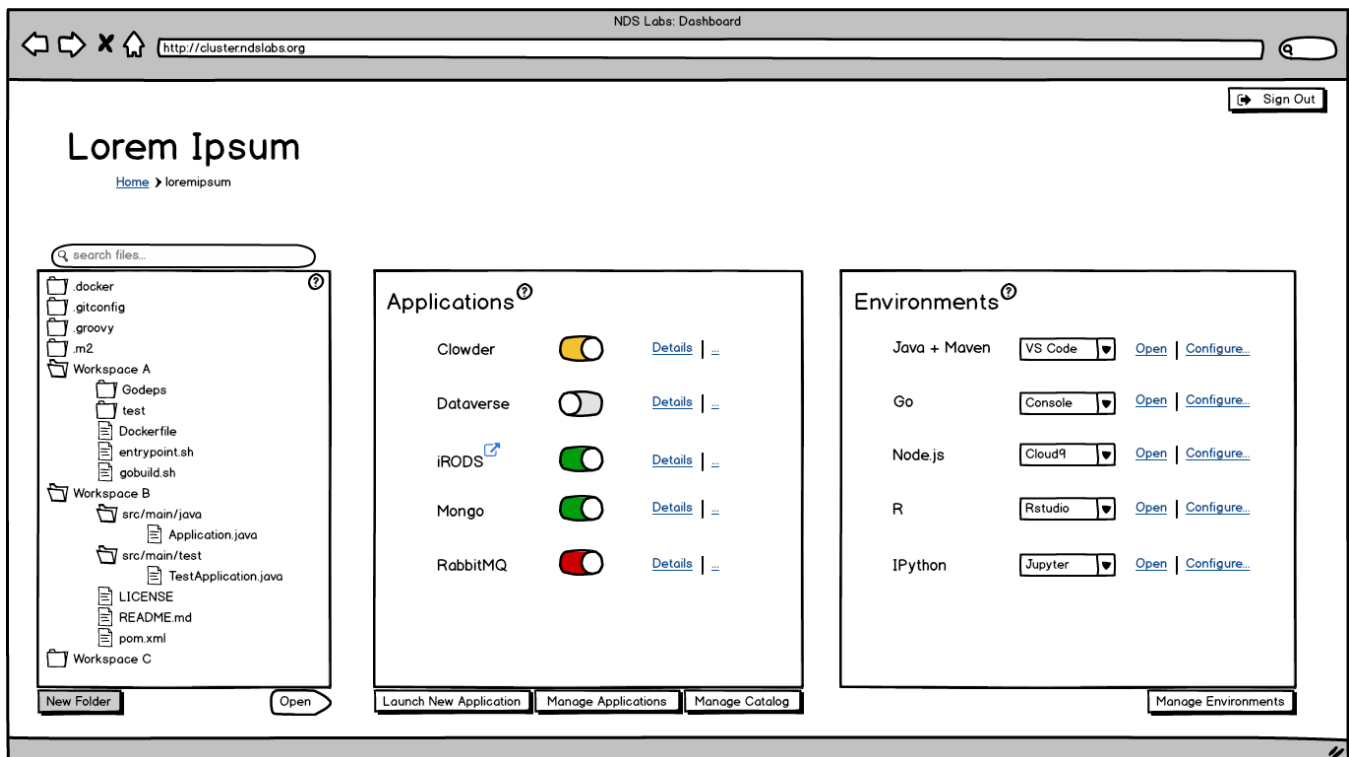
Available functions:

- [Manage Files](#)
- [Manage Account](#)
- [Manage Catalog](#)
- [Manage Applications \(Stacks\)](#)
  - [Launch new application \(i.e. MongoDB, MySQL, RabbitMQ, Clowder, iRODS, etc\)](#)
  - [Start / Stop single application](#)
  - [Configure single application](#)
  - [Navigate to "Manage Applications" view](#)
  - [Navigate to "Manage Catalog" view](#)
- [Manage Development Environments](#)
  - [Choose editor of choice \(i.e. VS Code, Cloud9, Rstudio, Jupyter, etc\)](#)
  - [Open development environment \(i.e. navigate to editor of choice\)](#)
  - [Configure single environment](#)
  - [Navigate to "Manage Environments" view](#)

## Dashboard w/ External File Manager (i.e. Cloud9)



## Integrated File Manager (Optional)



## Environments (DevEnvs)

Available functions:

- Open an existing environment
- View / Edit existing environments

- Choose a pre-built environment
- Create a custom environment
- Mount user directories to environments

## Open Environment Instance

### Cloud9 IDE

See <http://141.142.208.180:6080>

### VS Code

See <http://141.142.208.180:6080>

### Jupyter

See <http://141.142.211.192>

### Rstudio

See <http://141.142.211.192>

### Other Options

- X11 + IntelliJ / Eclipse / Net Beans / any other linux desktop editor
- Console (vi / emacs / nano / pico / any other command-line editor)
- [Codiad](#) ([Docker Image](#) available)
- [CollIDE](#) ([Video here](#), [source is available](#))
- [Eclipse Che](#) ([source is available](#), [many Docker Images](#) available)
- [Orion](#) (Eclipse, [source is available](#), [Docker Image](#) available)
- [Dirigible](#) (Eclipse, [source is available](#), [Docker Image](#) available)

### Fiddles

- [There's A Fiddle For That](#)
  - [JS Fiddle](#)
  - [Go Playground](#)
  - so many more

## Non-Options

### Non-IDEs

- [Firepad.io](#) (simple serverless collaboration tool, [source is available](#))

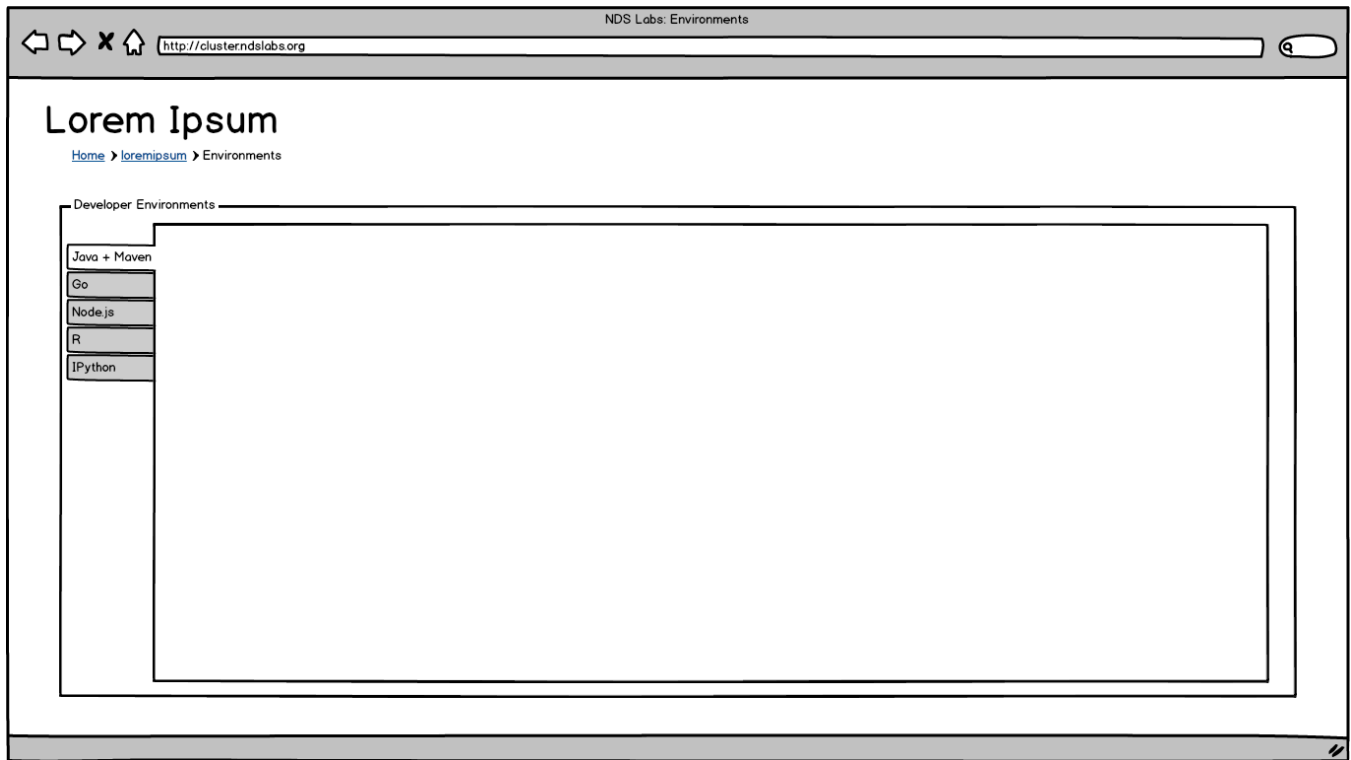
### Extinct (Dead Links)

- [Neutron Drive](#) (extinct, but [source is available](#))
- [Elix](#) (JavaScript-only is a bummer, possibly extinct)

### Cloud-Only Models

- [Codenvy](#)
  - [Codenvy Beta](#) - slightly better, no more runners, more like Cloud9
- [Cloud9 Hosted](#)
- [Koding](#) (they don't host - AWS / GCE only)
- [CodeAnywhere](#) (very bare-bones, although FTP support was cool)
- [StackHive](#) ([not free](#) / [not open-source](#))
- [CodeTasty](#) (CSS / HTML / JavaScript-only)
- [SourceLair](#) (no test / runtime support, just editing and possibly compiling)
- [Visual Studio Online](#) (VERY thorough, but totally feels like a Windows application..t
  - this one even offers project management / planning tools

## View Environment Instances



Create new Environment Instance

Configure Environment Instance

## Applications (Stacks)

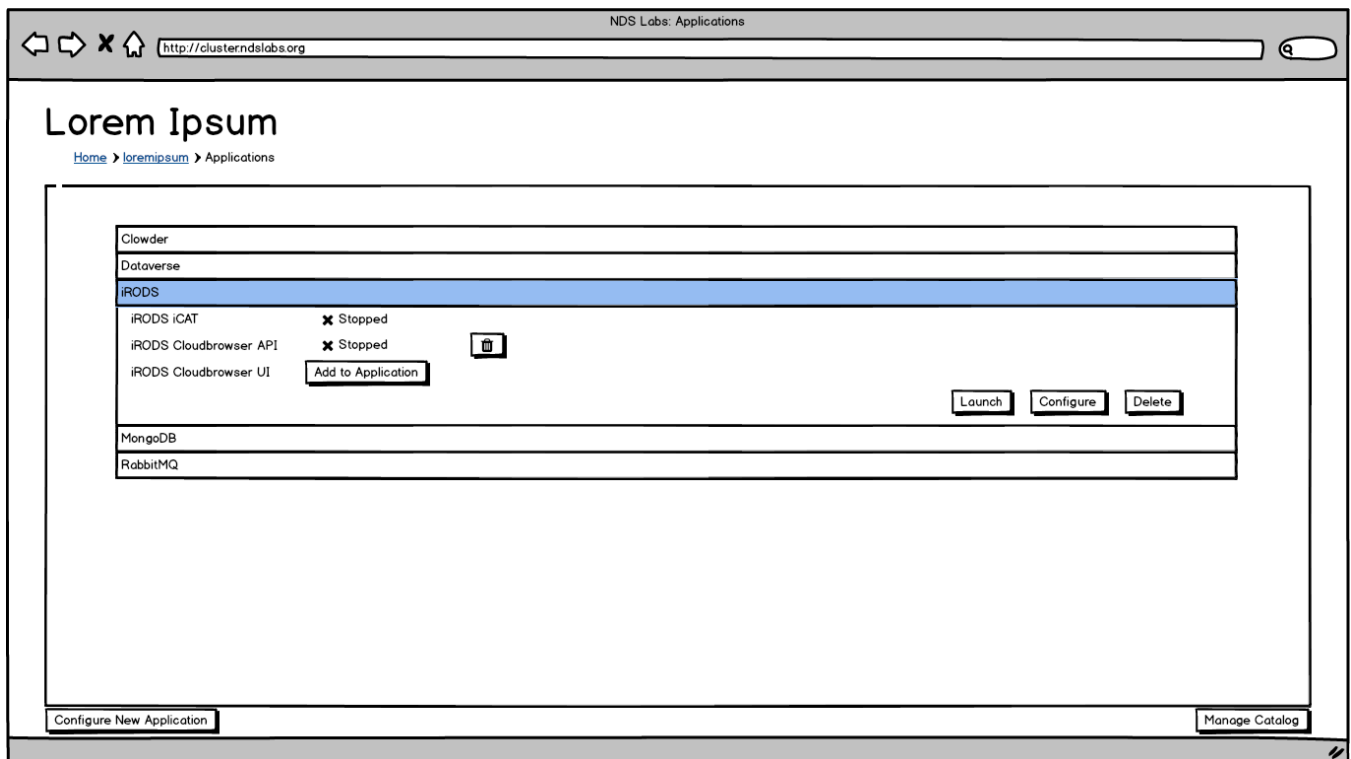
Current Labs dashboard (more or less)

Available functions:

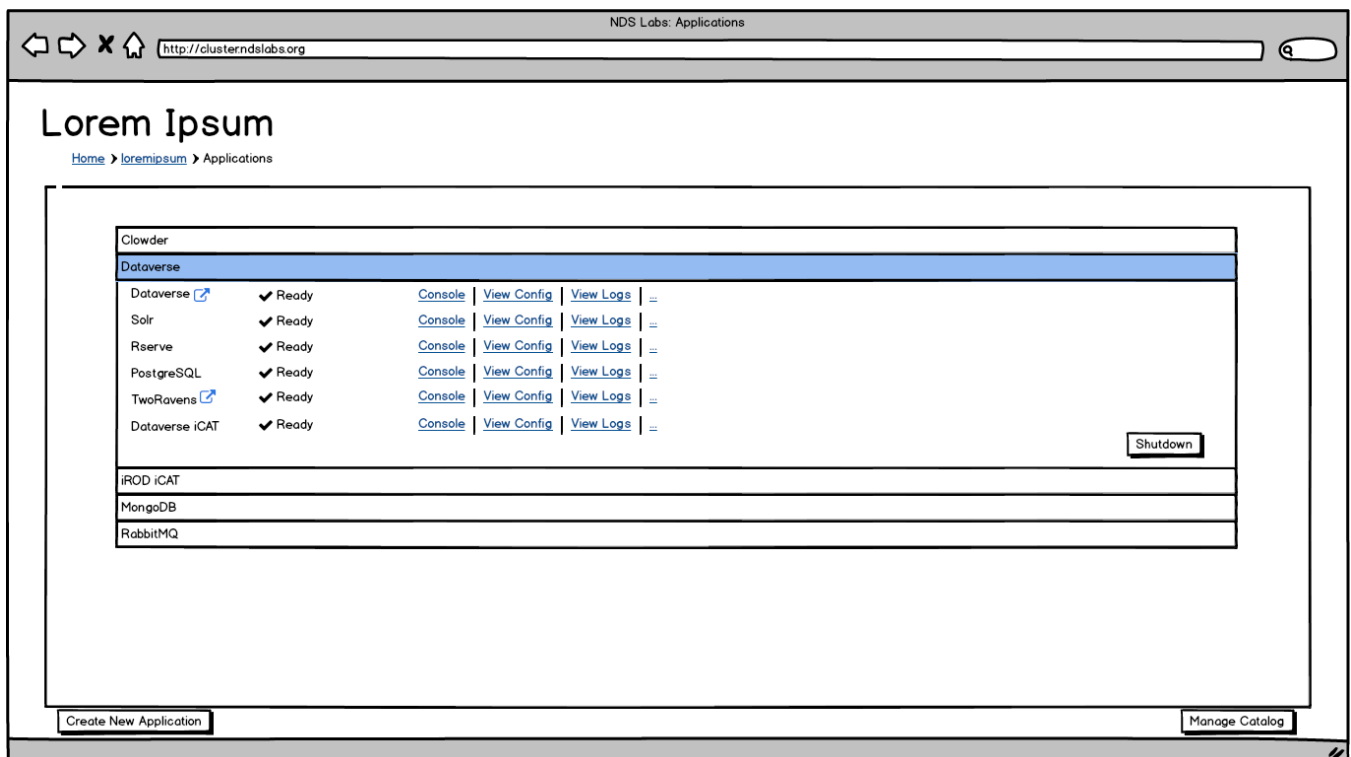
- Search / browse spec catalog for launch candidates
- Launch / configure new stack
- View / edit config of existing stack
- Open a console / logs for a running stack
- ~~Manage volumes~~ (this goes away, dashboard now manages user's volume)
- Delete stack / ~~volume~~

View Applications

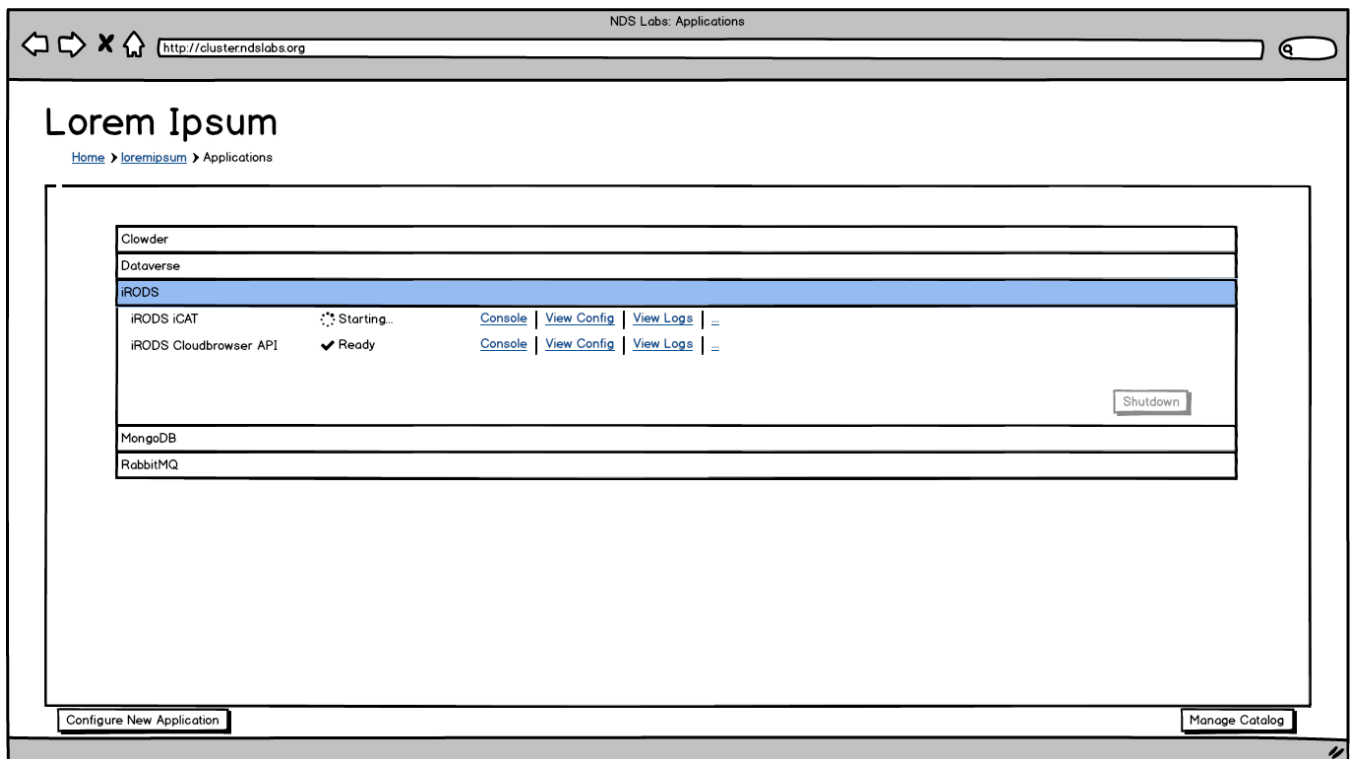
**Stopped Applications**



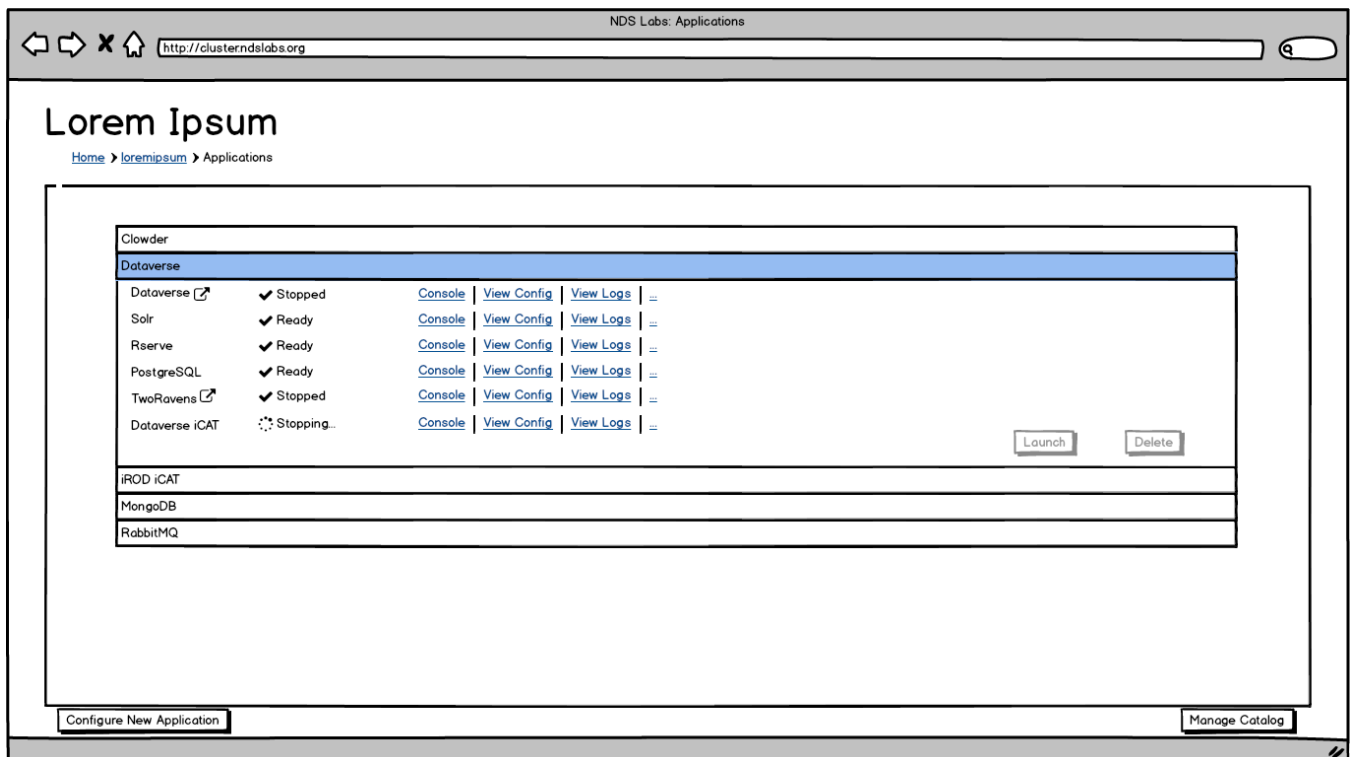
## Running Applications



## Launch Stopped Application (Start Stack)



## Shutdown Running Application (Stop Stack)



## Configure (New Application / Edit Stopped Application)

Configure Application

Select an application to launch:

Clowder

## Clowder

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cras gravida nulla risus, vel efficitur odio pretium quis. Nunc laoreet feugiat scelerisque. Nullam vitae orci tincidunt ipsum mattis fringilla luctus vel tortor. Integer est est, ornare a lacinia id, posuere nec nisl. Maecenas sagittis tempus metus, vel luctus lacus elementum id. Maecenas dapibus sapien ut dui venenatis pellentesque. Nunc porta commodo risus non varius.

Name Your Application (optional)

Dependencies

☒ MongoDB
 ☐ Elasticsearch
 ☒ Image Preview Extractor
 ☒ Image Metadata Extractor
 ☒ PlantCV Extractor
 ☐ Speech2Text Extractor
 ☒ Video Preview Extractor

Exposure

☐ Internal
 ☒ External

☐ Internal
 ☐ External

☒ Internal
 ☐ External

☒ Internal
 ☐ External

☐ Internal
 ☒ External

☐ Internal
 ☐ External

☒ Internal
 ☐ External

Configuration

Property	Value
SMTP_HOST	smtp.ncsa.illinois.edu
ELASTICSEARCH_CLUSTERNAME	clowder
RABBITMQ_EXCHANGE	clowder
TOOLMANAGER_URI	http://localhost:8082

Cancel

Finish

## Catalog

Available functions:

- Browse specs in catalog
  - Select a spec to view verbose detail
  - Add / Import new specs
  - Edit / Share existing specs
  - Clone / Override existing specs

## View Catalog Entries





Export Catalog Entry

```
{
  "label": "Clowder",
  "key": "clowder",
  "description": "A scalable data repository where you can share,
organize and analyze data.",
  "image": "ndslabs/clowder:0.9.2",
  "display": "stack",
  "access": "external",
  "depends": [
    {
      "key": "mongo",
      "required": true
    },
    {
      "key": "elasticsearch",
      "required": false
    },
  ]
}
```

Close Copy to Clipboard

Import Catalog Entry

Import Catalog Entry

Paste your JSON spec here:

```
{
  "key": "mongo",
  "label": "MongoDB",
  "image": "mongo:3.2.4",
  "description": "A cross-platform document-oriented NoSQL
database",
  "display": "standalone",
  "access": "internal",
  "ports": [
    { "port": 27017, "protocol": "tcp" }
  ],
  "volumeMounts": [
    { "mountPath": "/data/db", "name": "mongo" }
  ],
  "resourceLimits": {
    "memory": "1Gi",
    "cpu": "1"
  }
}
```

Cancel Import

Historical

