

Automation for IBM Watson Deployments – Flip Book

<https://github.com/IBM/watson-automation>

IBM AI Research and IBM Build Lab



Module catalog

Module search

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Category

AI/ML

Filter by category

Cloud provider

All providers

Filter by a cloud provider

Software provider

All providers

Filter by a software provider

Module type

All types

Filter by module type

Status

Released

Filter by status

AI/ML

Module	Name	Group	Latest version	Type	Status	Provider	Build
IBM Watson Studio	ibm-watson-studio	watson-studio	v1.2.0	terraform	released	ibm	Verify passing
CP Behavior Analytics Service	gitops-cp-bas	gitops-cp-bas	v1.1.1	gitops	released	ibm-cp	Verify passing
Watson Knowledge Catalog	gitops-cp-wkc	gitops-cp-wkc	v1.2.0	gitops	released	ibm-cp	Verify passing
Watson Machine Learning	gitops-cp-wml	gitops-cp-wml	v1.2.0	gitops	released	ibm-cp	Verify passing
cp-watson-assistant	gitops-cp-watson-assistant	gitops-cp-watson-assistant	v1.0.0	gitops	released	ibm-cp	Verify passing
cp-watson-discovery	gitops-cp-watson-discovery	gitops-cp-watson-discovery	v1.0.0	gitops	released	ibm-cp	Verify passing
IBM Watson NLP	terraform-gitops-watson-nlp	watson-embed	v1.0.0	gitops	released	ibm	Verify passing

Module catalog

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Category

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Filter by category

Cloud provider

[All providers](#) ▾

Filter by a cloud provider

Software provider

[All providers](#) ▾

Filter by a software provider

Module type

[All types](#) ▾

Filter by module type

Status

[Released](#) ▾

Filter by status

Examples

Module	Name	Group	Latest version	Type	Status	Provider	Build
terraform-gitops-ubi	terraform-gitops-ubi	terraform-gitops-ubi	v0.0.26	gitops	beta	 Verify	passing

The screenshot shows a code editor interface with the following details:

- Explorer View:** On the left, there is a sidebar titled "EXPLORER" containing a tree view of files and folders. The "bom.yaml" file is selected in the "OPEN EDITORS" section.
- Editor View:** The main area displays the "bom.yaml" file content. The file is a YAML document defining a BillOfMaterial for a cluster. It includes sections for apiVersion, kind, metadata, spec, and modules.
- Status Bar:** At the bottom, the status bar shows the file path "roks-new-nlp > ! bom.yaml", line count "Ln 28, Col 1", character count "Spaces: 2", encoding "UTF-8", line separator "LF", file type "YAML", and icons for search, refresh, and other operations.

```
! bom.yaml x
roks-new-nlp > ! bom.yaml
  1 apiVersion: cloudnativetoolkit.dev/v1alpha1
  2 kind: BillOfMaterial
  3 metadata:
  4   name: cluster-with-watson-nlp
  5 spec:
  6   modules:
  7     - name: ibm-vpc
  8       version: v1.17.0
  9     - name: ibm-vpc-subnets
 10       version: v1.14.0
 11     - name: ibm-vpc-gateways
 12       version: v1.10.0
 13     - name: ibm-ocp-vpc
 14       version: v1.16.0
 15     - name: ibm-object-storage
 16       version: v4.1.0
 17     - name: argocd-bootstrap
 18       version: v1.12.0
 19     - name: gitops-repo
 20       alias: gitops_repo
 21       version: v1.22.2
 22     - name: terraform-gitops-ubi
 23       alias: terraform_gitops_ubi
 24       version: v0.0.8
 25     - name: terraform-gitops-watson-nlp
 26       alias: terraform_gitops_watson_nlp
 27       version: v0.0.80
 28
```

The screenshot shows a Visual Studio Code window with the following details:

- Explorer View:** On the left, it lists the project structure. The file `variables-template.yaml` is currently selected.
- Editor View:** The main area displays the content of the `variables-template.yaml` file. The code is a YAML configuration for provisioning a cluster with Watson NLP, including variables for region, resource group, common tags, VPC subnets, OCP worker count, cluster flavor, namespace, and GitOps repository settings.
- Bottom Status Bar:** Shows the file name `variables-template.yaml`, line number `Ln 49`, column number `Col 53`, and encoding `UTF-8`.

```
variables:
  # overall
  - name: region
    description: The IBM Cloud region where the instance should be provisioned
    value: xxx
  - name: resource_group_name
    description: The name of the IBM Cloud resource group where the resources should be provisioned
    value: xxx
  - name: common_tags
    description: The list of tags that should be applied to all resources (does not work)
    value: []
  # vpc
  - name: ibm-vpc-subnets__count
    description: The number of subnets that should be created in the VPC
    value: 1
  # ocp
  - name: worker_count
    description: The number of workers that should be provisioned per subnet
    value: 2
  - name: cluster_flavor
    description: The flavor of the worker nodes that will be provisioned
    value: bx2.4x16
  # namespace
  - name: namespace_name
    description: The name of the namespace that will be created within the cluster
    value: xxx
  # gitops
  - name: gitops_repo_repo
    description: The name of the gitops repository that will be created
    value: xxx
  - name: gitops_repo_host
    value: github.com
  - name: gitops_repo_org
    value: xxx
  - name: gitops_repo_username
    value: xxx
  - name: gitops_repo_project # only used for Azure
    value: xxx
  # nlp
```

The screenshot shows the Visual Studio Code interface with the following details:

- Explorer View:** On the left, it lists the project structure under "WATSON-AUTOMATION". The "variables-template.yaml" file is currently selected.
- Editor View:** The main area displays the content of the "variables-template.yaml" file. The code is a YAML configuration for a Watson NLP runtime, defining various parameters like registry names, image versions, and command-line arguments.
- Status Bar:** At the bottom, the status bar shows "Ln 70, Col 1" and other settings like "Spaces: 2", "UTF-8", "LF", "YAML", and icons for "Find", "Replace", and "Search".

```
44 # nlp
45 - name: terraform_gitops_watson_nlp_runtime_image
46   value: watson-nlp-runtime:1.0.18
47 - name: terraform_gitops_watson_nlp_runtime_registry
48   value: watson
49 - name: terraform_gitops_watson_nlp_accept_license
50   value: false
51 - name: terraform_gitops_watson_nlp_imagePullSecrets
52   value:
53     - ibm-entitlement-key
54 - name: terraform_gitops_watson_nlp_models
55   value:
56     - registry: watson
57       image: watson-nlp_syntax_izumo_lang_en_stock:1.0.6
58 - name: terraform_gitops_watson_nlp_registries
59   value:
60     - name: watson
61       url: cp.icr.io/cp/ai
62 - name: terraform_gitops_watson_nlp_registryUserNames
63   value:
64     - registry: watson
65       userName: cp
66
67 # ubi
68 - name: terraform_gitops_ubi_command
69   value: echo 'helloworld'
```

The screenshot shows a code editor interface with a dark theme. On the left is a sidebar with various icons and sections:

- EXPLORER**: Shows a file tree with the following structure:
 - ! bom.yaml
 - ! variables-template.yaml
 - credentials-template.properties** (highlighted)
- OPEN EDITORS**: Shows three open files:
 - ! bom.yaml roks-new-nlp
 - ! variables-template.yaml r...
 - x credentials-template.pro...
- WATSON-AUTOMATION**: Shows a folder structure:
 - > documentation
 - > helm-nlp
 - > roks-existing-nlp
 - ✓ roks-new-nlp
 - ✓ output
 - > cluster-with-watson-nlp
 - > terraform
 - \$ apply.sh
 - ! bom.yaml
 - (credentials.properties)
 - (dependencies.dot)
 - \$ destroy.sh
 - ! variables-template.yaml
 - ! variables.yaml
 - (credentials-template.propo...)
 - (credentials.properties)
 - \$ launch.sh
 - ! bom.yaml
 - !.gitignore
 - LICENSE
 - README.md
 - > OUTLINE
 - > TIMELINE

The main area contains the content of the `credentials-template.properties` file:

```
1 export TF_VAR_gitops_repo_token=xxx
2 export TF_VAR_ibmcloud_api_key=xxx
3 export TF_VAR_terraform_gitops_watson_nlp_registry_credentials=xxx,xxx,xxx
4
```

At the bottom, there are status indicators: `main*`, `0 △ 0`, `Ln 1, Col 1 Spaces: 4 UTF-8 LF Java Properties`, and a few small icons.

The screenshot shows a code editor interface with a dark theme. On the left is the Explorer sidebar, which lists project files and folders. The current file being edited is `bom.yaml` located in the `cluster-with-watson-nlp` directory under the `roks-existing-nlp` project.

EXPLORER

- OPEN EDITORS**
 - `bom.yaml` (roks-existing-nlp)
- WATSON-AUTOMATION**
 - `documentation`
 - `helm-nlp`
 - roks-existing-nlp**
 - `output`
 - cluster-with-watson-nlp**
 - `terraform`
 - `apply.sh`
 - `bom.yaml`
 - `credentials.properties`
 - `credentials.properties.bac...`
 - `dependencies.dot`
 - `destroy.sh`
 - `variables-template.yaml`
 - `variables.yaml`
 - `credentials-template.prop...`
 - `credentials.properties`
 - `launch.sh`
 - `bom.yaml`
 - `roks-new-nlp`
 - `.gitignore`
 - `LICENSE`
 - `README.md`

bom.yaml

```
! bom.yaml
 1 apiVersion: cloudnativetoolkit.dev/v1alpha1
 2 kind: BillOfMaterial
 3 metadata:
 4   name: cluster-with-watson-nlp
 5 spec:
 6   modules:
 7     - name: ocp-login
 8     - name: argocd-bootstrap
 9       version: v1.12.0
10     - name: gitops-repo
11       alias: gitops_repo
12       version: v1.22.2
13     - name: terraform-gitops-ubi
14       alias: terraform_gitops_ubi
15       version: v0.0.8
16     - name: terraform-gitops-watson-nlp
17       alias: terraform_gitops_watson_nlp
18       version: v0.0.80
19
```

MAIN

Ln 19, Col 1 Spaces: 2 UTF-8 LF YAML ⚙️ 🔍

The screenshot shows a Visual Studio Code (VS Code) interface with the following details:

- Explorer View:** On the left, it shows a tree view of the project structure. The root folder is "roks-existing-nlp". Inside "output", there is a "cluster-with-watson-nlp" folder containing "terraform", "apply.sh", "bom.yaml", "variables-template.yaml", "credentials.properties", "dependencies.dot", and "destroy.sh".
- Editors:** There are two open editors at the top. The active editor is "variables-template.yaml" (highlighted in purple), which contains the following Terraform GitOps configuration:

```
19 # nlp
20 - name: terraform_gitops_watson_nlp_runtime_image
21 | value: watson-nlp-runtime:1.0.18
22 - name: terraform_gitops_watson_nlp_runtime_registry
23 | value: watson
24 - name: terraform_gitops_watson_nlp_accept_license
25 | value: false
26 - name: terraform_gitops_watson_nlp_imagePullSecrets
27 | value:
28 |   - ibm-entitlement-key
29 - name: terraform_gitops_watson_nlp_models
30 | value:
31 |   - registry: watson
32 |     image: watson-nlp_syntax_izumo_lang_en_stock:1.0.6
33 - name: terraform_gitops_watson_nlp_registries
34 | value:
35 |   - name: watson
36 |     url: cp.icr.io/cp/ai
37 - name: terraform_gitops_watson_nlp_registryUserNames
38 | value:
39 |   - registry: watson
40 |     userName: cp
41
42 # ubi
43 - name: terraform_gitops_ubi_command
44 | value: echo 'helloworld'
```

- Status Bar:** At the bottom, the status bar displays the following information: Ln 46, Col 1, Spaces: 2, UTF-8, LF, YAML.

The screenshot shows a code editor window with the following details:

- EXPLORER** sidebar:
 - OPEN EDITORS**: bom.yaml, variables-template.yaml, credentials-template.properties
 - WATSON-AUTOMATION**: documentation, helm-nlp, roks-existing-nlp
 - output**: cluster-with-watson-nlp, terraform, apply.sh, bom.yaml, credentials.properties, credentials.properties.bac..., dependencies.dot, destroy.sh, variables-template.yaml, variables.yaml, credentials-template.prop..., credentials.properties, launch.sh, bom.yaml
 - roks-new-nlp
 - .gitignore, LICENSE, README.md- OPEN EDITORS** tab:
 - bom.yaml
 - variables-template.yaml
 - credentials-template.properties
- credentials-template.properties** content:

```
1 export TF_VAR_gitops_repo_token=xxx
2 export TF_VAR_ibmcloud_api_key=xxx
3 export TF_VAR_terraform_gitops_watson_nlp_registry_credentials=xxx,xxx,xxx
4 export TF_VAR_server_url=xxx
5 export TF_VAR_cluster_login_token=xxx
6
```
- Bottom Bar**: main*, ⌂, ⌂ 0 △ 0, Ln 6, Col 1, Spaces: 4, UTF-8, LF, Java Properties, ⌂, ⌂

```
...atson-automation/roks-new-nlp/output — com.docker.cli • launch.sh
niklasheidloff@Niklass-MBP roks-new-nlp % pwd
~/Users/niklasheidloff/git/watson-automation/roks-new-nlp
niklasheidloff@Niklass-MBP roks-new-nlp % iascable --version
2.25.4
niklasheidloff@Niklass-MBP roks-new-nlp % iascable build -i bom.yaml
Loading catalog from url(s): https://modules.cloudnativetoolkit.dev/index.yaml
Name: cluster-with-watson-nlp
Writing output to: ./output
niklasheidloff@Niklass-MBP roks-new-nlp % cd output
niklasheidloff@Niklass-MBP output % ./launch.sh
Cleaning up old container: cli-tools-HV0Cg
parsing credentials.properties...
Initializing container cli-tools-HV0Cg from quay.io/cloudnativetoolkit/cli-tools:v1.2-v2.2.19
f3f99b08b61532e132f946b366ba735cde6ea9cb1f72bc43ee3e8b47cc353ebf
Attaching to running container...
/terraform $ cd cluster-with-watson-nlp/
/terraform/cluster-with-watson-nlp $ ./apply.sh
There are some problems with the CLI configuration:

| Error: The specified plugin cache dir /home/devops/.terraform.d/plugin-cache cannot be opened: stat /home/devops/.terraform.d/plugin-cache: no such file or directory
|
```

As a result of the above problems, Terraform may not behave as intended.

Initializing modules...

```
Downloading git::https://github.com/cloud-native-toolkit/terraform-tools-argocd-bootstrap.git?ref=v1.12.0 for argocd-bootstrap...
- argocd-bootstrap in .terraform/modules/argocd-bootstrap
Downloading git::https://github.com/cloud-native-toolkit/terraform-util-gitops-bootstrap.git?ref=v1.3.0 for argocd-bootstrap.bootstrap...
- argocd-bootstrap.bootstrap in .terraform/modules/argocd-bootstrap.bootstrap
Downloading git::https://github.com/cloud-native-toolkit/terraform-util-clis.git for argocd-bootstrap.bootstrap.setup_clis...
- argocd-bootstrap.bootstrap.setup_clis in .terraform/modules/argocd-bootstrap.bootstrap.setup_clis
Downloading git::https://github.com/cloud-native-toolkit/terraform-tools-openshift-cicd.git?ref=v1.11.0 for argocd-bootstrap.openshift_cicd...
- argocd-bootstrap.openshift_cicd in .terraform/modules/argocd-bootstrap.openshift_cicd
Downloading git::https://github.com/cloud-native-toolkit/terraform-tools-argocd.git?ref=v2.19.1 for argocd-bootstrap.openshift_cicd.gitops...
```

```
...atson-automation/roks-new-nlp/output — com.docker.cli • launch.sh
output — com.docker.cli • launch.sh — 145x37
~/git/watson-automation/roks-new-nlp/output — zsh ...
~/git/ibm-watson-embed-clients/watson_nlp/protos — zsh ...
+ ...
+ ...

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
module.olm.data.clis_check.clis: Reading...
module.olm.data.clis_check.clis: Read complete after 1s [id=clis:yq:jq:igc:kubeseal:oc:kubectl]
module.cluster.data.external.dirs: Reading...
module.cluster.data.external.dirs: Read complete after 0s [id=-]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
<= read (data resources)

Terraform will perform the following actions:

# module.cluster.data.external.credentials will be read during apply
# (config refers to values not yet known)
<= data "external" "credentials" {
    + id      = (known after apply)
    + program = [
        + "bash",
        + ".terraform/modules/cluster/scripts/get-credentials.sh",
    ]
    + query   = {
        + "ibmcloud_api_key"    = "dKai_6CbY8JStbljQYTy2_bDAoxDKwPtnh9cjENLSgoy"
        + "private_server_url" = (known after apply)
        + "public_endpoint"   = (known after apply)
        + "public_server_url" = (known after apply)
        + "token"              = ""
        + "username"           = "apikey"
    }
}
```

```
output — com.docker.cli • launch.sh — 145x37
...atson-automation/roks-new-nlp/output — com.docker.cli • launch.sh
~/git/watson-automation/roks-new-nlp/output — zsh ...
~/git/bm-watson-embed-clients/watson_nlp/protos — zsh ...
+ [x]

Warning: Experimental feature "module_variable_optional_attrs" is active

on .terraform/modules/ibm-vpc-subnets/version.tf line 10, in terraform:
10:   experiments = [module_variable_optional_attrs]

Experimental features are subject to breaking changes in future minor or patch releases, based on feedback.

If you have feedback on the design of this feature, please open a GitHub issue to discuss it.

Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

[ Enter a value: yes

module.cluster.module.setup_clis.null_resource.print: Creating...
module.argocd-bootstrap.module.bootstrap.module.setup_clis.null_resource.print: Creating...
module.resource_group.null_resource.wait_for_sync: Creating...
module.gitops_repo.module.setup_clis.null_resource.print: Creating...
module.cluster.module.setup_clis.null_resource.print: Provisioning with 'local-exec'...
module.cluster.module.setup_clis.null_resource.print (local-exec): Executing: ["#!/bin/sh" "-c" "echo 'Installing clis: jq'"]
module.argocd-bootstrap.module.bootstrap.module.setup_clis.null_resource.print: Provisioning with 'local-exec'...
module.argocd-bootstrap.module.bootstrap.module.setup_clis.null_resource.print (local-exec): Executing: ["#!/bin/sh" "-c" "echo 'Installing clis: helm,jq,argocd,kubectl,oc'"]
module.gitops_repo.module.setup_clis.null_resource.print: Provisioning with 'local-exec'...
module.gitops_repo.module.setup_clis.null_resource.print (local-exec): Executing: ["#!/bin/sh" "-c" "echo 'Installing clis: jq,yq,gitu'"]
module.cluster.module.setup_clis.null_resource.print (local-exec): Installing clis: jq
module.argocd-bootstrap.module.bootstrap.module.setup_clis.null_resource.print (local-exec): Installing clis: helm,jq,argocd,kubectl,oc
module.cluster.module.setup_clis.null_resource.print: Creation complete after 0s [id=6978174959235522865]
module.resource_group.null_resource.wait_for_sync: Provisioning with 'local-exec'...
module.resource_group.null_resource.wait_for_sync (local-exec): Executing: ["#!/bin/sh" "-c" "echo 'Sync: '"]
module.gitops_repo.module.setup_clis.null_resource.print (local-exec): Installing clis: jq,yq,gitu
module.resource_group.null_resource.wait_for_sync (local-exec): Sync:
module.argocd-bootstrap.module.bootstrap.module.setup_clis.null_resource.print: Creation complete after 0s [id=8940141203313978519]
module.util-clis.null_resource.print: Creating...
```

```
...atson-automation/roks-new-nlp/output — com.docker.cli • launch.sh — 145x37
~/git/watson-automation/roks-new-nlp/output — -zsh ... ~/git/ibm-watson-embed-clients/watson_nlp/protos — -zsh +
```

```
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.null_resource.tekton_operator_helm (local-exec): (output suppressed due to sensitive value in config)
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.null_resource.tekton_operator_helm (local-exec): (output suppressed due to sensitive value in config)
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.null_resource.tekton_operator_helm (local-exec): (output suppressed due to sensitive value in config)
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.null_resource.tekton_operator_helm (local-exec): (output suppressed due to sensitive value in config)
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.null_resource.tekton_operator_helm: Creation complete after 5m5s [id=6503342275644419073]
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.data.external.tekton_ready: Reading...
module.argocd-bootstrap.module.openshift_cicd.module.pipelines.data.external.tekton_ready: Read complete after 3s [id=-]

Warning: Attribute Deprecated

with module.argocd-bootstrap.module.bootstrap.random_string.suffix,
on .terraform/modules/argocd-bootstrap.bootstrap/main.tf line 12, in resource "random_string" "suffix":
12:   number = true

**NOTE**: This is deprecated, use `numeric` instead.

(and 6 more similar warnings elsewhere)

Apply complete! Resources: 104 added, 0 changed, 0 destroyed.

Outputs:

argocd-bootstrap_argocd_namespace = "openshift-gitops"
argocd-bootstrap_argocd_service_account = "openshift-gitops-argocd-application-controller"
argocd-bootstrap_sealed_secrets_cert = <<EOT
-----BEGIN CERTIFICATE-----
MIIFkDCCA3igAwIBAgIQa5DbvhI6/5fJb0SmwMs71TANBgkqhkiG9w0BAQsFADAw
MRYwFAYDVQQKEw1zZWFsZWQtc2VjcmV0MRYwFAYDVQQDEw1zZWFsZWQtc2VjcmV0
MB4XDTIyMTAyNTA2NDQzMVoXDTIzMTAyNTA2NDQzMVoMDEWMBQGA1UEChMNc2Vh
bGVkLXN1Y3JldDEWMBQGA1UEAxMnC2VhbGVkLXN1Y3JldCDAiIwDQVJKoZIhvcN
AQEBBQADggIPADCCAgcGgIBAOBn06486SUX/3hexDRz6SLAJICLSWQn+VRQFQA
```

```
output -- com.docker.cli + launch.sh - 145x37
...atson-automation/roks-new-nlp/output -- com.docker.cli + launch.sh
~/git/watson-automation/roks-new-nlp/output -- zsh ...
~/git/ibm-watson-embed-clients/watson_nlp/protos -- zsh ...
+ [x]

5zA3hARYIJDzoa4sDKe4FeKwmK1VNYneiT972N70hv9Cn44FthF30X3G1hsJKw+J
CnWohc
G1TvDh
gQT3m9
dt15Ag
AAyIKw
BwMFBg
BAGCnw
ggIBAMkyDICBimK04YMDhNx3Heo]1QkFy/PW5NQ/YSoVm01MHLQL1xHTP6oPgSYK
UWjepIIW2nQJIKeXfidaotoC5vueEJLMypbTuPNB1kVuFJZU9b9G1WsUSI/6b4YB
DVyxgKYC7wih0YqlSzq69nEXTVDnC12C7N1Ju71MAKWEergY+fRsBzXgMtSkEH
2MAwpHsMzLBDJSF7hYU1h34HknDy0+AyJhu8vep/QedpeTAQ2JvrV9QNgk0nAvBB
1h17XYWtWwf+sf6eTVZ1kf9dBRkydJrJQ98GeqBwZgO88eah5P5IFrjeovi
bJeXK1FOAqnQuiQhquLEKNVgu0gTsYSD7z10bdvM6r0KH+zxvhPivHlh0ylT8
W+1LvYYNaA/BLDPTz42S7eFod4vG1UyQ/z2jNN7xXzNeg2pbXi3+esQNctjsZIp
WGWI1tYzNxEpT//cJKRwaQiPRJG1fgnzWCVLzRYRC8z0k1Z33hvisN8vZlQaMmEv
gZ63ybmtZ81kyo0eVc5I59zJ91Am2MwbxVKM8ViJ2bfkJ3iBiOJGpS/qWKMkOwa
FZYfOsATZ3yBTQvTmGamevDZ9/jrdN2+6lQzs0NhUQYYZKzh5oaphqDxE8DPn8YA
key30WWrLBpdDQfmzULD/SajgRGVSUuUt0NMZNkx7GCmNjW
-----END CERTIFICATE-----

EOT
sealed-secret-cert_private_key = <sensitive>
terraform_gitops_ubi_branch = "main"
terraform_gitops_ubi_layer = "applications"
terraform_gitops_ubi_name = "ubi-helm"
terraform_gitops_ubi_namespace = "watson-demo"
terraform_gitops_ubi_server_name = "default"
terraform_gitops_ubi_type = "base"
terraform_gitops_watson_nlp_branch = "main"
terraform_gitops_watson_nlp_layer = "services"
terraform_gitops_watson_nlp_name = "watson-nlp"
terraform_gitops_watson_nlp_namespace = "watson-demo"
terraform_gitops_watson_nlp_server_name = "default"
terraform_gitops_watson_nlp_type = "base"
util-clis_bin_dir = "/terraform/cluster-with-watson-nlp/terraform/bin2"
/terraform/cluster-with-watson-nlp $
```



Resource list

Create resource

Name	Group	Location	Product	Status	Tags
<input type="text"/> Filter by name or IP address...	<input type="text"/> Filter by group or org...	<input type="text"/> Filter...	<input type="text"/> Filter...	<input type="text"/> Filter...	<input type="text"/> Filter...
Containers (1 / 86)					
niklas-cluster	niklas	London	Red Hat OpenShift on IBM Cloud	Normal	-
Networking (7 / 102)					
iks-cdboc32l091kud0eam80	niklas	London	Virtual Private Endpoint for VPC	Healthy	-
kube-cdboc32l091kud0eam80	niklas	London	Security Group for VPC	-	-
kube-cdboc32l091kud0eam80-b50788ed5fd04...	niklas	London	Load Balancer for VPC	Active	-
kube-r018-95344963-b374-48b6-ba62-430c5...	niklas	London	Security Group for VPC	-	-
niklas-vpc	niklas	London	Virtual Private Cloud	Available	-
niklas-vpc-base	niklas	London	Security Group for VPC	-	-
niklas-vpc-default	niklas	London	Security Group for VPC	-	-
Storage (1 / 484)					
niklas-cos	niklas	Global	Cloud Object Storage	Active	-



IBM Cloud Search resources and products... Catalog Manage 2032340 - Federated Advocates ... ? 🔍 📁 🚧 ⏱

Clusters / **niklas-cluster** Normal Add tags 🔍 Help OpenShift web console Actions...

Overview

Worker nodes 2 of 2 Normal Details ↓

Worker pools

DevOps New

Node status 1 of 1 Normal Details ↓

Add-on status

Master status Normal Docs ↗

Ingress status Healthy Docs ↗

Details

Cluster ID	Version	Infrastructure	VPC
cdboc32l091kud0eam80	4.10.32_1536	VPC Gen2	r018-95344963...
Zones	Created	Resource group	Image security enforcement
London 1	25/10/2022, 08:45	niklas	Enable

Node health Worker node details

2 total nodes

Critical 0% Warning 0% Normal 100% Pending 0%

Networking

Service endpoint URL

Public enabled Copy link 🔍 Private enabled Copy link 🔍

Ingress subdomain niklas-cluster-162e406f043e20da9b0ef0731954a894-0000.eu-gb.containers.appdomain

Integrations

Logging Connect Monitoring Connect Key management service Enable

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Project: watson-demo ▾

Deployments

Create Deployment

Name ▾

Search by name...



Name ▾

Status ▾

Labels ▾

Pod selector ▾

 ubi-helm-ubi-helm

1 of 1 pods

app=ubi-helm
app.kubernetes.io/instance=watson-demo-ubi-he...
chart=ubi-helm-ubi-helm heritage=Helm
release=ubi-helm

 app=ubi-helm, release=ubi-helm watson-nlp-embedded

1 of 1 pods

app.kubernetes.io/component=embedded
app.kubernetes.io/instance=watson-demo-watson...
app.kubernetes.io/managed-by=Helm
app.kubernetes.io/name=watson-nlp
app.kubernetes.io/version=0.0.1
helm.sh/chart=watson-nlp-0.0.11

 app.kubernetes.io/component=embedded,
app.kubernetes.io/instance=watson-nlp,
app.kubernetes.io/name=watson-nlp

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Deployments > Deployment details

watson-nlp-embedded

Actions ▾

Details Metrics YAML ReplicaSets Pods Environment Events

Deployment details

**Name**

watson-nlp-embedded

Update strategy

RollingUpdate

Namespace

NS watson-demo

Max unavailable

1 of 1 pod

Labels

Edit

app.kubernetes.io/component=embedded
app.kubernetes.io/instance=watson-demo-watson-nlp app.kubernetes.io/managed-by=Helm
app.kubernetes.io/name=watson-nlp app.kubernetes.io/version=0.0.1
helm.sh/chart=watson-nlp-0.0.11

Max surge

3 greater than 1 pod

Progress deadline seconds

1800 seconds

Min ready seconds

Not configured

Pod selector

Q app.kubernetes.io/component=embedded, app.kubernetes.io/instance=watson-nlp,
app.kubernetes.io/name=watson-nlp

Node selector

No selector

Tolerations

0 tolerations

Annotations

2 annotations

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Project: watson-demo ▾

Pods > Pod details

P watson-nlp-embedded-65c97b45b9-fz6rp Running

Actions ▾

[Details](#) [Metrics](#) [YAML](#) [Environment](#) [Logs](#) [Events](#) [Terminal](#)

Pod details

Name

watson-nlp-embedded-65c97b45b9-fz6rp

Status Running**Namespace**

NS watson-demo

Restart policy

Always restart

Labels[Edit !\[\]\(dc7c67547b9a74aa2a386775cd967195_img.jpg\)](#)**Active deadline seconds**

Not configured

[app.kubernetes.io/component=embedded](#) [app.kubernetes.io/instance=watson-nlp](#)[app.kubernetes.io/name=watson-nlp](#) [pod-template-hash=65c97b45b9](#)**Node selector**

No selector

Pod IP

172.17.63.168

Node 10.242.0.5**Tolerations**[2 tolerations !\[\]\(706b4c32c036b543a3213755f6954fab_img.jpg\)](#)**Annotations**[6 annotations !\[\]\(4c6989d4eae5a489b10b11dd21474fde_img.jpg\)](#)**Created at** 25 Oct 2022, 09:25**Owner** RS watson-nlp-embedded-65c97b45b9

Init containers

Name	Image	State	Restarts	Started	Finished	Exit code
------	-------	-------	----------	---------	----------	-----------

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Project: watson-demo

Owner

RS watson-nlp-embedded-65c97b45b9

Init containers

Name	Image	State	Restarts	Started	Finished	Exit code
model-0	cp.icr.io/cp/ai/watson-nlp_sy...	Terminated	0	25 Oct 2022, 09:26	25 Oct 2022, 09:26	0

Containers

Name	Image	State	Restarts	Started	Finished	Exit code
product-abc	cp.icr.io/cp/ai/watson-nlp_ru...	Running	0	25 Oct 2022, 09:29	-	-

Volumes

Name	Mount path	SubPath	Type	Permissions	Utilized by
models	/app/models	No subpath	Read/Write	C product-abc	
kube-api-access-gd8hq	/var/run/secrets/kubernetes.io/serviceaccount	No subpath	Read-only	C product-abc	

Conditions

Type	Status	Updated	Reason	Message
Initialized	True	25 Oct 2022, 09:26	-	-
Ready	True	25 Oct 2022, 09:29	-	-
ContainersReady	True	25 Oct 2022, 09:29	-	-
PodScheduled	True	25 Oct 2022, 09:25	-	-

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Project: watson-demo

Services > Service details

watson-nlp-embedded

Details YAML Pods

Service details

Name

watson-nlp-embedded

Namespace

NS watson-demo

Labels

app.kubernetes.io/instance=watson-demo-watson-nlp

Edit

Pod selectorQ app.kubernetes.io/component=embedded, app.kubernetes.io/instance=watson-nlp,
app.kubernetes.io/name=watson-nlp**Annotations**

1 annotation

Session affinity

None

Created at

⌚ 25 Oct 2022, 09:25

Owner

No owner

Service routing

Hostname

watson-nlp-embedded.watson-demo.svc.cluster.local

Accessible within the cluster only

Service address

Type	Location
Cluster IP	172.21.225.155 Accessible within the cluster only

Service port mapping

Name	Port	Protocol	Pod port or name
rest	S 8080	TCP	P 8080
grpc	S 8085	TCP	P 8085

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Pods > Pod details

P watson-nlp-embedded-65c97b45b9-fz6rp  Running

Actions ▾

Details Metrics YAML Environment Logs Events Terminal

Connecting to  product-abc Expand

```
sh-4.4$ ls -la
total 60
drwxr-xr-x. 1 app app      4096 Oct 25 07:29 .
dr-xr-xr-x. 1 root root    4096 Oct 25 07:29 ..
-rw-r--r--. 1 app app       18 Jun 20 11:31 .bash_logout
-rw-r--r--. 1 app app      141 Jun 20 11:31 .bash_profile
-rw-r--r--. 1 app app      376 Jun 20 11:31 .bashrc
-rw-r--r--. 1 root root    3164 Oct 20 17:28 eligible_modules.json
drwxr-xr-x. 2 root root    4096 Oct 20 17:28 generated
-rw-r--r--. 1 root root    5470 Oct 20 17:28 ineligible_modules.json
drwxrwsrwx. 3 root 1000650000 4096 Oct 25 07:26 models
drwxr-xr-x. 2 root root    4096 Oct 20 17:28 protos
sh-4.4$ ls -la models/
total 16
drwxrwsrwx. 3 root      1000650000 4096 Oct 25 07:26 .
drwxr-xr-x. 1 app        app     4096 Oct 25 07:29 ..
drwxr-sr-x. 2 1000650000 1000650000 4096 Oct 25 07:26 syntax_izumo_lang_en_stock
sh-4.4$
```

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Pods > Pod details

 ubi-helm-ubi-helm-685c6bfc8f-vj7c8  Running

Actions ▾

[Details](#) Metrics YAML Environment Logs Events Terminal

Pod details

Name

ubi-helm-ubi-helm-685c6bfc8f-vj7c8

Status Running**Namespace**

NS watson-demo

Restart policy

Always restart

Labels[Edit](#)

app=ubi-helm

pod-template-hash=685c6bfc8f

release=ubi-helm

Active deadline seconds

Not configured

Node selector

No selector

Pod IP

172.17.63.167

Tolerations

2 tolerations

Node 10.242.0.5**Annotations**

6 annotations

Created at

25 Oct 2022, 09:25

Owner RS ubi-helm-ubi-helm-685c6bfc8f

Containers

Name	Image	State	Restarts	Started	Finished	Exit code
 ubi-helm	ubi-helm:latest	 Running	0	25 Oct 2022, 09:25		

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Pods > Pod details

 ubi-helm-ubi-helm-685c6bfc8f-vj7c8  Running

Actions ▾

Details Metrics YAML Environment Logs Events Terminal



Log streaming...



ubi-helm ▾

Current log ▾



Search

 Wrap lines

Raw



Download



Expand

7 lines

```
1  helloworld
2  helloworld
3  helloworld
4  helloworld
5  helloworld
6  helloworld
7  helloworld
```



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Pods > Pod details

P ubi-helm-ubi-helm-685c6bfc8f-vj7c8 ⚡ Running

Actions ▾

Details Metrics YAML Environment Logs Events Terminal

Connecting to C ubi-helm

Expand

```
sh-4.4$ curl -X POST "http://watson-nlp-embedded:8080/v1/watson.runtime.nlp.v1/NlpService/SyntaxPredict" \
>   -H "accept: application/json" \
>   -H "grpc-metadata-mm-model-id: syntax_izumo_lang_en_stock" \
>   -H "content-type: application/json" \
>   -d "{ \"rawDocument\": { \"text\": \"It is so easy to embed Watson NLP in applications. Very cool.\\" } }"
{"text":"It is so easy to embed Watson NLP in applications. Very cool.", "producerId":{"name":"Izumo Text Processing", "version":"0.0.1"}, "tokens":[{"span":{"begin":0, "end":2, "text":"It"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":3, "end":5, "text":"is"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":6, "end":8, "text":"so"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":9, "end":13, "text":"easy"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":14, "end":16, "text":"to"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":17, "end":22, "text":"embed"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":23, "end":29, "text":"Watson"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":30, "end":33, "text":"NLP"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":34, "end":36, "text":"in"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":37, "end":49, "text":"applications"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":50, "end":51, "text":".\"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":55, "end":56, "text":"Very"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":56, "end":60, "text":"cool"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":60, "end":61, "text":".\"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":61, "end":62, "text":"Very cool."}}, {"span":{"begin":62, "end":63, "text":".\"}}}], "sentences":[{"span":{"begin":0, "end":50, "text":"It is so easy to embed Watson NLP in applications."}], "paragraphs":[{"span":{"begin":0, "end":61, "text":"It is so easy to embed Watson NLP in applications. Very cool."}}]}sh-4.4$ █
```

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Project: watson-demo ▾

Secrets > Secret details

S ibm-entitlement-key

[Add Secret to workload](#)

Actions ▾

[Details](#)[YAML](#)

Secret details

Name

ibm-entitlement-key

Type

kubernetes.io/dockerconfigjson

Namespace

NS watson-demo

Labels[Edit](#)**No labels****Annotations**[0 annotations](#)**Created at**

⌚ 25 Oct 2022, 09:25

Owner

SS ibm-entitlement-key

Data[Reveal values](#)**.dockerconfigjson**

.....



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Project: All Projects ▾

Create ▾

Filter ▾

Name ▾ watson

Name watson 

Clear all filters

Name	Namespace	Type	Size	Created	⋮
 network-diagnostics-token-msxlf	 openshift-network-diagnostics	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 09:11	⋮
 network-diagnostics-token-mszb5	 openshift-network-diagnostics	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 09:11	⋮
 repo-niklas-heidloff-watson-demo.git	 openshift-gitops	Opaque	4	⌚ 25 Oct 2022, 09:24	⋮

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Project: openshift-gitops ▾

argocd-access

Details

YAML

Secret details

Name

argocd-access

Type

Opaque

Namespace

NS openshift-gitops

Labels

Edit

app=argocd grouping=garage-cloud-native-toolkit app.kubernetes.io/part-of=argocd
app.kubernetes.io/instance=argocd-config release=argocd-config
app.kubernetes.io/version=1.0 app.kubernetes.io/component=tools
app.kubernetes.io/managed-by=Helm helm.sh/chart=tool-config-0.13.0
app.kubernetes.io/name=argocd group=catalyst-tools

Annotations

3 annotations

Created at

⌚ 30 Sept 2022, 09:45

Owner

No owner

Data

Reveal values

ARGOCD_PASSWORD

.....



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Project: All Projects

Secrets

Create

Filter

Name

argocd

Name

argocd

Clear all filters

Name	Namespace	Type	Size	Created	
S argocd-access	(NS) openshift-gitops	Opaque	4	⌚ 25 Oct 2022, 09:24	⋮
S argocd-secret	(NS) openshift-gitops	Opaque	5	⌚ 25 Oct 2022, 09:22	⋮
S argocd-server-tls	(NS) openshift-gitops	kubernetes.io/tls	2	⌚ 25 Oct 2022, 09:24	⋮
S cluster-image-registry-operator-dockercfg-bbbd4	(NS) openshift-image-registry	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 08:54	⋮
S clusterrole-aggregation-controller-dockercfg-clh2q	(NS) kube-system	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 08:52	⋮
S generic-garbage-collector-dockercfg-n997v	(NS) kube-system	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 08:52	⋮
S generic-garbage-collector-token-5w4dn	(NS) kube-system	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 08:52	⋮
S ibm-storage-metrics-agent-dockercfg-ldfhq	(NS) kube-system	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 09:02	⋮
S openshift-gitops-argocd-application-controller-dockercfg-g66c5	(NS) openshift-gitops	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 09:23	⋮
S openshift-gitops-argocd-application-controller-token-cn5lq	(NS) openshift-gitops	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 09:22	⋮
S openshift-gitops-argocd-application-controller-token-zczdk	(NS) openshift-gitops	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 09:23	⋮
S openshift-gitops-argocd-dex-server-dockercfg-cvq4z	(NS) openshift-gitops	kubernetes.io/dockercfg	1	⌚ 25 Oct 2022, 09:23	⋮
S openshift-aitsops-araocd-dex-	(NS) openshift-aitsops	kubernetes.io/service-account-token	4	⌚ 25 Oct 2022, 09:23	⋮



IAM#niklas_heidloff@de.ibm.com ▾

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Project: openshift-gitops ▾

Secrets > Secret details

S argocd-access

Details

YAML

Secret details

Name

argocd-access

Type

Opaque

Namespace

NS openshift-gitops

Labels

Edit 

app=argocd grouping=garage-cloud-native-toolkit app.kubernetes.io/part-of=argocd
app.kubernetes.io/instance=argocd-config release=argocd-config
app.kubernetes.io/version=1.0 app.kubernetes.io/component=tools
app.kubernetes.io/managed-by=Helm helm.sh/chart=tool-config-0.13.0
app.kubernetes.io/name=argocd group=catalyst-tools

Annotations

3 annotations 

Created at

⌚ 25 Oct 2022, 09:24

Owner

No owner

Data

 Reveal values

ARGOCD_PASSWORD

.....

OpenShift GitOps

 Cluster Argo CD 

OpenShift on IBM Cloud

 Manage Cluster 

Add Secret to workload

Actions ▾



FILTERS

 FAVORITES ONLY

SYNC STATUS

- Unknown 0
- Synced 8
- OutOfSync 0

HEALTH STATUS

- Unknown 0
- Progressing 0
- Suspended 0
- Healthy 8
- Degraded 0
- Missing 0

LABELS

 LABELS

PROJECTS

 PROJECTS

CLUSTERS

 CLUSTERS

NAMESPACES

 NAMESPACES

0-bootstrap

Project: 0-bootstrap
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: argocd/0-bootstrap/cluster/default
Destination: in-cluster
Namespace: openshift-gitops

SYNC

REFRESH

DELETE

1-infrastructure

Project: 1-infrastructure
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: argocd/1-infrastructure/cluster/default
Destination: in-cluster
Namespace: openshift-gitops

SYNC

REFRESH

DELETE

2-services

Project: 2-services
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: argocd/2-services/cluster/default
Destination: in-cluster
Namespace: openshift-gitops

SYNC

REFRESH

DELETE

3-applications

Project: 3-applications
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: argocd/3-applications/cluster/default
Destination: in-cluster
Namespace: openshift-gitops

SYNC

REFRESH

DELETE

namespace-watson-demo

Project: 1-infrastructure
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: payload/1-infrastructure/namespace/watson-d...
Destination: in-cluster
Namespace: default

SYNC

REFRESH

DELETE

watson-demo-ibm-entitlement-key

Project: 1-infrastructure
Labels:
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: payload/1-infrastructure/namespace/watson-d...
Destination: in-cluster
Namespace: watson-demo

SYNC

REFRESH

DELETE

watson-demo-ubi-helm

Project: 3-applications
Labels: app.kubernetes.io/instance=3-applications
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: payload/3-applications/namespace/watson-de...
Destination: in-cluster
Namespace: watson-demo

SYNC

REFRESH

DELETE

watson-demo-watson-nlp

Project: 2-services
Labels: app.kubernetes.io/instance=2-services
Status: Healthy Synced
Repository: <https://github.ibm.com/niklas-heidloff/watson...>
Target Revi...
Path: payload/2-services/namespace/watson-demo/...
Destination: in-cluster
Namespace: watson-demo

SYNC

REFRESH

DELETE



v2.3.7+L

APP DETAILS APP DIFF SYNC SYNC STATUS HISTORY AND ROLLBACK DELETE REFRESH

APP HEALTH Healthy

CURRENT SYNC STATUS Synced
To main (68c0b0b)LAST SYNC RESULT Sync OK
To 68c0b0bAuthor: Niklas Heidloff <niklas_heidloff@de.ibm.com>
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...Succeeded an hour ago (Tue Oct 25 2022 09:25:48 GMT+0200)
Author: Niklas Heidloff <niklas_heidloff@de.ibm.com> -
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...

FILTERS

NAME

NAME

KINDS

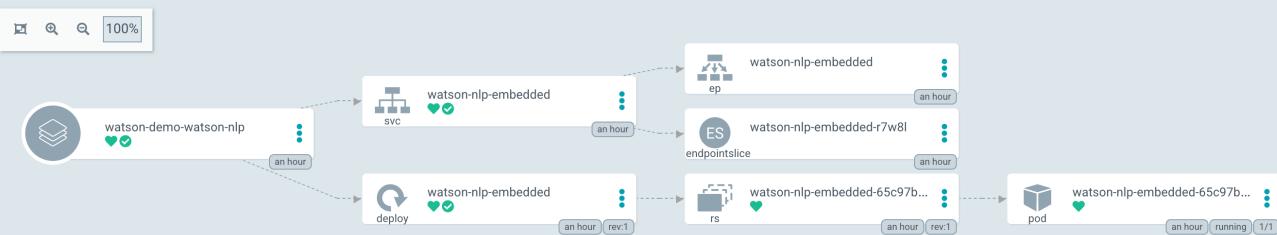
KINDS

SYNC STATUS

-
-
- Synced
-
-
-
- OutOfSync

HEALTH STATUS

-
-
- Healthy
-
-
-
- Progressing
-
-
-
- Degraded
-
-
-
- Suspended
-
-
-
- Missing
-
-
-
- Unknown



 Applications /

v2.3.7+L

APP DETAILS **APP DIFF** 

APP HEALTH  **Healthy**

Author: Comment: Adds argo

FILTERS

NAME

KINDS

SYNC STATUS

 Synced

 OutOfSync

HEALTH STATUS

 Healthy

 Progressing

 Degraded

 Suspended

 Missing

 Unknown

 **watson-nlp-embedded-65c97b45b9-fz6rp** 

 **SYNC**  **DELETE**

SUMMARY **EVENTS** **LOGS**

KIND	Pod
NAME	watson-nlp-embedded-65c97b45b9-fz6rp
NAMESPACE	watson-demo
CREATED_AT	10/25/2022 09:25:48
IMAGES	cp.icr.io/cp/ai/watson-nlp-runtime:1.0.18 cp.icr.io/cp/ai/watson-nlp_syntax_izumo_lang_en_stock:1.0.6
STATE	Running

LIVE MANIFEST Hide Managed Fields 

```
1 apiVersion: v1
2 kind: Pod
3 metadata:
4   annotations:
5     cni.projectcalico.org/containerID: 1431983166ea9472c59b1d0d5ed0fc87b34fca42c8aa3f645622bd9d2d63914
6     cni.projectcalico.org/podIP: 172.17.63.168/32
7     cni.projectcalico.org/podIPs: 172.17.63.168/32
8     k8s.v1.cni.cncf.io/network-status: |-
9       [
10         {
11           "name": "k8s-pod-network",
12           "ips": [
13             "172.17.63.168"
14           ],
15           "default": true,
16           "dns": {}
17         }
18       ]
19     k8s.v1.cni.cncf.io/networks-status: |-
20       [
21         {
22           "name": "k8s-pod-network",
23           "ips": [
24             "172.17.63.168"
25           ],
26           "dns": {}
27         }
28       ]
```



v2.3.7+L

[APP DETAILS](#) [APP DIFF](#) [SYNC](#) [SYNC STATUS](#) [HISTORY AND ROLLBACK](#) [DELETE](#) [REFRESH](#) [Log out](#)

APP HEALTH Healthy

CURRENT SYNC STATUS Synced
To main (68c0b0b)LAST SYNC RESULT Sync OK
To 68c0b0bAuthor: Niklas Heidloff <niklas_heidloff@de.ibm.com>
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...Succeeded an hour ago (Tue Oct 25 2022 09:25:46 GMT+0200)
Author: Niklas Heidloff <niklas_heidloff@de.ibm.com> -
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...

FILTERS

NAME

KINDS

SYNC STATUS
 Synced
 OutOfSync

HEALTH STATUS
 Healthy
 Progressing
 Degraded
 Suspended
 Missing
 Unknown





APP DETAILS

APP DIFF

SYNC

SYNC STATUS

HISTORY AND ROLLBACK

DELETE

REFRESH ▾

v2.3.7+L

APP HEALTH
 HealthyCURRENT SYNC STATUS
 Synced

To main (68c0b0b)

LAST SYNC RESULT
 Sync OK

To 68c0b0b

Author: Niklas Heidloff <niklas_heidloff@de.ibm.com>
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...Succeeded an hour ago (Tue Oct 25 2022 09:25:46 GMT+0200)
Author: Niklas Heidloff <niklas_heidloff@de.ibm.com> -
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...

FILTERS

NAME



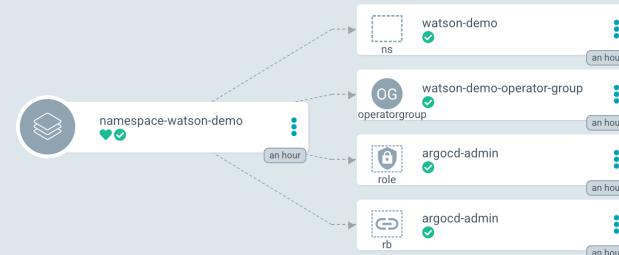
KINDS

SYNC STATUS

- Synced
- OutOfSync

HEALTH STATUS

- Healthy
- Progressing
- Degraded
- Suspended
- Missing
- Unknown





v2.3.7+L

APP DETAILS APP DIFF SYNC SYNC STATUS HISTORY AND ROLLBACK DELETE REFRESH

APP HEALTH Healthy

CURRENT SYNC STATUS Synced To main (68c0b0b)

LAST SYNC RESULT Sync OK To 68c0b0b

Author: Niklas Heidloff <niklas_heidloff@de.ibm.com>
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...Succeeded an hour ago (Tue Oct 25 2022 09:25:47 GMT+0200)
Author: Niklas Heidloff <niklas_heidloff@de.ibm.com> -
Comment: Adds argocd config yaml for ibm-entitlement-key in wat...

FILTERS

NAME

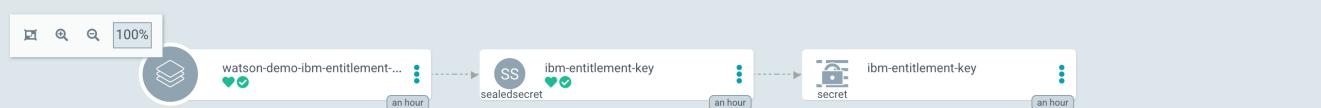
KINDS

SYNC STATUS

- Synced
- OutOfSync

HEALTH STATUS

- Healthy
- Progressing
- Degraded
- Suspended
- Missing
- Unknown





NEW PROJECT

Log out



NAME	DESCRIPTION
0-bootstrap	
1-infrastructure	
2-services	
3-applications	
default	



v2.3.7+L

+ ADD ROLE

+ ADD SYNC WINDOW

✖ DELETE

Log out



SUMMARY

ROLES

WINDOWS

EVENTS

GENERAL

EDIT

NAME

2-services

DESCRIPTION

LABELS

app=argocd app.kubernetes.io/instance=0-bootstrap app.kubernetes.io/managed-by=Helm

app.kubernetes.io/name=services app.kubernetes.io/part-of=gitops-bootstrap app.kubernetes.io/version=1.16.0

helm.sh/chart=services-0.24.0

SOURCE REPOSITORIES ⓘ

EDIT

<https://github.ibm.com/niklas-heidloff/watson-demo.git>

SCOPED REPOSITORIES ⓘ

Project has no source repositories

DESTINATIONS ⓘ

EDIT

Server

Name

Namespace

<https://kubernetes.default.svc>

*

[niklas-heidloff / watson-demo](#) Private[Unwatch](#) 1[Star](#) 0[Fork](#) 0[Code](#)[Issues](#)[Pull requests](#)[Zenhub](#)[Projects](#)[Wiki](#)[Security](#)[Insights](#)[Settings](#)[main](#) ▾[9 branches](#)[0 tags](#)[Go to file](#)[Add file](#) ▾[Code](#) ▾

 niklas-heidloff and Cloud-Native Toolkit Adds argocd config yaml for artifactory-...	... 8293ea8 4 hours ago	11 commits
 argocd	Adds argocd config yaml for artifactory-key in watson-demo for defa...	4 hours ago
 docs	Populates initial gitops structure	4 hours ago
 payload	Adds payload yaml for artifactory-key (#5)	4 hours ago
 .owner_module	Saves owner_module id	4 hours ago
 README.md	Populates initial gitops structure	4 hours ago
 config.yaml	Populates initial gitops structure	4 hours ago
 kubeseal_cert.pem	Populates initial gitops structure	4 hours ago

README.md



GitOps repository

Repository that contains the yaml resources defining the desired state of the configuration for a cluster. The resources are organized to support deployments to multiple clusters.

App of Apps

There are two major types of resources in the repository:

1. ArgoCD configuration
2. Application "payloads"

ArgoCD configuration

In ArgoCD, collections of kubernetes resources that are deployed together are called "applications". Applications in ArgoCD are configured using a custom resource definition (CRD) in the cluster which means ArgoCD applications

About

No description, website, or topics provided.

[Readme](#)

Releases

No releases published
[Create a new release](#)

Languages

Mustache 100.0%

The screenshot shows a code editor interface with a dark theme. On the left is a sidebar with icons for Explorer, Open Editors, Watson Demo, and other project components. The main area displays a file named `! namespace-watson-demo.yaml` under the `argocd/1-infrastructure` directory. The code is an Argo Project manifest:

```
argocd > 1-infrastructure > cluster > default > base > ! namespace-watson-demo.yaml
1 apiVersion: argoproj.io/v1alpha1
2 kind: Application
3 metadata:
4   name: namespace-watson-demo
5   finalizers:
6     - resources-finalizer.argocd.argoproj.io
7 spec:
8   destination:
9     namespace: default
10    server: https://kubernetes.default.svc
11  project: 1-infrastructure
12  source:
13    path: payload/1-infrastructure/namespace/watson-demo/namespace
14    repoURL: https://github.ibm.com/niklas-heidloff/watson-demo.git
15    targetRevision: main
16  syncPolicy:
17    automated:
18      prune: true
19      selfHeal: true
20  ignoreDifferences: []
21
```

The bottom status bar shows the file is 21 lines long, in Col 1, with 2 spaces, in UTF-8 encoding, and is a YAML file. It also includes navigation icons and a search icon.

The screenshot shows a code editor interface with a sidebar and a main editor area.

Left Sidebar:

- EXPLORER**: Shows the directory structure of the repository:
 - argocd
 - Watson-DEMO
 - base
 - namespace-watson-demo.yaml
 - watson-demo-artifactory-key.yaml
 - kustomization.yaml
 - .gitkeep
 - cluster/default
 - base
 - watson-demo-watson-nlp.yaml
 - kustomization.yaml
 - .gitkeep
 - 3-applications
 - cluster/default
 - base
 - watson-demo-ubi-helm.yaml
 - kustomization.yaml
 - .gitkeep
 - docs
 - payload
 - .owner_module
 - config.yaml
 - kubeseal_cert.pem
 - README.md
 - OUTLINE**
 - TIMELINE**

Main Editor Area:

File: watson-demo-artifactory-key.yaml

Content:

```
argocd > 1-infrastructure > cluster > default > base > ! watson-demo-artifactory-key.yaml
1  apiVersion: argoproj.io/v1alpha1
2  kind: Application
3  metadata:
4    name: watson-demo-artifactory-key
5    finalizers:
6      - resources-finalizer.argocd.argoproj.io
7  spec:
8    destination:
9      namespace: watson-demo
10     server: https://kubernetes.default.svc
11   project: 1-infrastructure
12   source:
13     path: payload/1-infrastructure/namespace/watson-demo/artifactory-key
14     repoURL: https://github.ibm.com/niklas-heidloff/watson-demo.git
15     targetRevision: main
16   syncPolicy:
17     automated:
18       prune: true
19       selfHeal: true
20   ignoreDifferences: []
21
```

Bottom Status Bar:

Ln 21, Col 1 Spaces: 2 UTF-8 LF YAML ⚙️ 🔍

The screenshot shows a code editor interface with a dark theme. On the left is a sidebar with various icons for file operations like copy, search, and refresh. Below the sidebar are sections for 'OUTLINE' and 'TIMELINE'. The main area has a title bar with the file name 'watson-demo-ubi-helm.yaml' and a status bar at the bottom indicating 'Ln 23, Col 1' and other file details.

EXPLORER

...
✓ OPEN EDITORS
 × ! watson-demo-ubi-helm.yaml argocd/3-applic...
✓ WATSON-DEMO
 ✓ argocd
 > 0-bootstrap
 ✓ 1-infrastructure
 ✓ cluster/default
 ✓ base
 ! namespace-watson-demo.yaml
 ! watson-demo-artifactory-key.yaml
 ! kustomization.yaml
 ❖ .gitkeep
 ✓ 2-services
 ✓ cluster/default
 ✓ base
 ! watson-demo-watson-nlp.yaml
 ! kustomization.yaml
 ❖ .gitkeep
 ✓ 3-applications
 ✓ cluster/default
 ✓ base
 ! watson-demo-ubi-helm.yaml
 ! kustomization.yaml
 ❖ .gitkeep
 > docs
 > payload
 ☰ .owner_module
 ! config.yaml
 GREEN kubeseal_cert.pem
 ⓘ README.md

! watson-demo-ubi-helm.yaml ×

argocd > 3-applications > cluster > default > base > ! watson-demo-ubi-helm.yaml

```
1  apiVersion: argoproj.io/v1alpha1
2  kind: Application
3  metadata:
4    name: watson-demo-ubi-helm
5    finalizers:
6      - resources-finalizer.argocd.argoproj.io
7  spec:
8    destination:
9      namespace: watson-demo
10     server: https://kubernetes.default.svc
11   project: 3-applications
12   source:
13     path: payload/3-applications/namespace/watson-demo/ubi-helm
14     repoURL: https://github.ibm.com/niklas-heidloff/watson-demo.git
15     targetRevision: main
16     helm:
17       | releaseName: ubi-helm
18   syncPolicy:
19     automated:
20       | prune: true
21       | selfHeal: true
22     ignoreDifferences: []
```

Ln 23, Col 1 Spaces: 2 UTF-8 LF YAML ⚙️ 🔍

The screenshot shows a code editor interface with a left sidebar and a main editor area.

Left Sidebar:

- EXPLORER**: Shows a tree view of the project structure:
 - argocd
 - Watson-DEMO
 - cluster/default
 - base
 - namespace-watson-demo.yaml
 - watson-demo-artifactory-key.yaml
 - kustomization.yaml
 - .gitkeep
 - 2-services
 - cluster/default
 - base
 - watson-demo-watson-nlp.yaml
 - kustomization.yaml
 - .gitkeep
 - 3-applications
 - cluster/default
 - base
 - watson-demo-ubi-helm.yaml
 - kustomization.yaml
 - .gitkeep
 - docs
 - payload
 - .owner_module
 - config.yaml
 - kubeseal_cert.pem
 - README.md
 - OUTLINE**
 - TIMELINE**

Main Editor Area:

The main editor shows the content of the file `watson-demo-watson-nlp.yaml`:

```
! watson-demo-watson-nlp.yaml X
argocd > 2-services > cluster > default > base > ! watson-demo-watson-nlp.yaml
1 apiVersion: argoproj.io/v1alpha1
2 kind: Application
3 metadata:
4   name: watson-demo-watson-nlp
5   finalizers:
6     - resources-finalizer.argocd.argoproj.io
7 spec:
8   destination:
9     namespace: watson-demo
10    server: https://kubernetes.default.svc
11  project: 2-services
12  source:
13    path: payload/2-services/namespace/watson-demo/watson-nlp
14    repoURL: https://github.ibm.com/niklas-heidloff/watson-demo.git
15    targetRevision: main
16    helm:
17      | releaseName: watson-nlp
18  syncPolicy:
19    automated:
20      | prune: true
21      | selfHeal: true
22  ignoreDifferences: []
```

The status bar at the bottom indicates: Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML ⚡ ⚡

The screenshot shows the Visual Studio Code (VS Code) interface. The left sidebar (Explorer) displays a file tree with the following structure:

- OPEN EDITORS
- WATSON-DEMO
 - argocd
 - docs
 - payload
 - 1-infrastructure
 - 2-services
 - namespace/watson-demo/watson-nlp
 - templates
 - _helpers.tpl
 - deployment.yaml
 - service.yaml
 - Chart.yaml
 - values.yaml
 - .gitkeep
 - 3-applications
 - .owner_module
 - config.yaml
 - kubeseal_cert.pem
 - README.md

The file `Chart.yaml` is selected in the Explorer and is displayed in the main editor area. The editor content is as follows:

```
apiVersion: v2
description: A module to deploy the watson-nlp helm chart
name: watson-nlp
# A chart can be either an 'application' or a 'library' chart.
#
# Application charts are a collection of templates that can be packaged into versioned archives
# to be deployed.
#
# Library charts provide useful utilities or functions for the chart developer. They're included as
# a dependency of application charts to inject those utilities and functions into the rendering
# pipeline. Library charts do not define any templates and therefore cannot be deployed.
type: application
# This is the chart version. This version number should be incremented each time you make changes
# to the chart and its templates, including the app version.
# Versions are expected to follow Semantic Versioning (https://semver.org/)
version: 0.0.11
# This is the version number of the application being deployed. This version number should be
# incremented each time you make changes to the application. Versions are not expected to
# follow Semantic Versioning. They should reflect the version the application is using.
# It is recommended to use it with quotes.
appVersion: "0.0.1"
#dependencies:
# - name: test
#   version: v0.0.11
#   repository: https://raw.githubusercontent.com/nheidloff/test-charts/main/index.yaml
```

The status bar at the bottom shows the file path as `payload > 2-services > namespace > watson-demo > watson-nlp > Chart.yaml`, and the status `Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML`.

The screenshot shows a code editor interface with the following details:

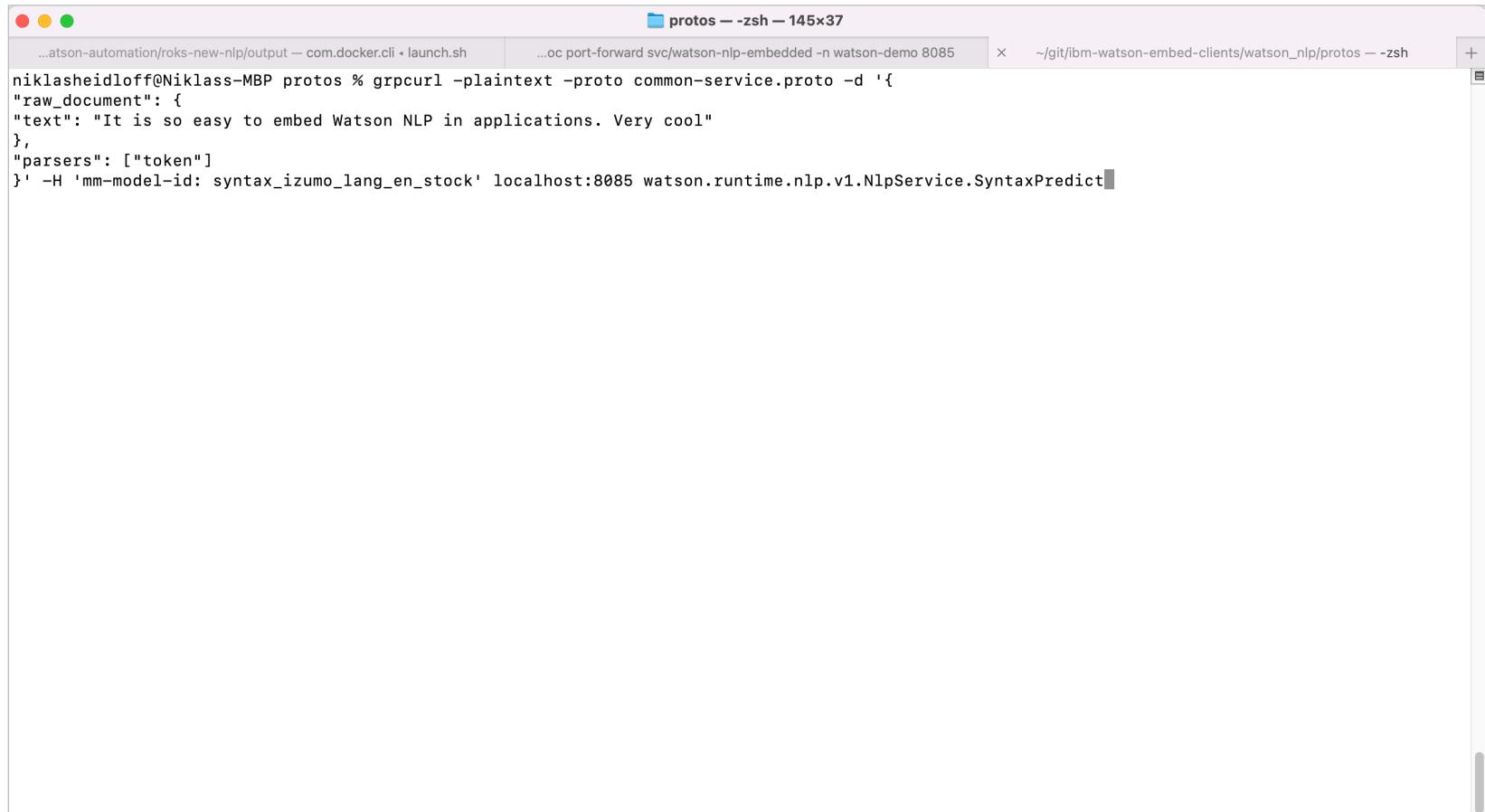
- Left Sidebar (Explorer):** Shows a file tree with the following structure:
 - OPEN EDITORS:** Chart.yaml, values.yaml
 - WATSON-DEMO:** argocd, docs, payload
 - 1-infrastructure
 - 2-services
 - namespace/watson-demo/watson-nlp
 - templates
 - _helpers.tpl
 - deployment.yaml
 - service.yaml
 - Chart.yaml
 - values.yaml
 - .gitkeep
 - 3-applications
 - .owner_module
 - config.yaml
 - kubeseal_cert.pem
 - README.md
- Top Bar:** Shows the current file names: Chart.yaml and values.yaml.
- Content Area:** Displays the contents of the values.yaml file.

```
1 "acceptLicense": true
2 "componentName": "embedded"
3 "imagePullSecrets":
4   - "ibm-entitlement-key"
5 "models":
6   - "image": "watson-nlp_syntax_izumo_lang_en_stock:1.0.6"
7   | "registry": "watson"
8 "registries":
9   - "name": "watson"
10  | "url": "cp.icr.io/cp/ai"
11 "runtime":
12  | "image": "watson-nlp-runtime:1.0.18"
13  | "registry": "watson"
14 "serviceType": "ClusterIP"
15
16
```
- Bottom Bar:** Shows the file name main, line numbers Ln 1, Col 1, and encoding UTF-8, LF, YAML.

output — oc port-forward svc/watson-nlp-embedded -n watson-demo 8085 — 145x37

```
...atson-automation/roks-new-nlp/output — com.docker.cli < launch.sh ...oc port-forward svc/watson-nlp-embedded -n watson-demo 8085 ~/git/ibm-watson-embed-clients/watson_nlp/protos --zsh +
```

```
niklasheidloff@Niklass-MBP output % oc port-forward svc/$WATSON_SERVICE -n $YOUR_NAMESPACE 8085
Forwarding from 127.0.0.1:8085 -> 8085
Forwarding from [::1]:8085 -> 8085
```



The screenshot shows a macOS terminal window with three tabs:

- Tab 1: ...atson-automation/roks-new-nlp/output — com.docker.cli < launch.sh
- Tab 2: ...oc port-forward svc/watson-nlp-embedded -n watson-demo 8085
- Tab 3: ~/git/ibm-watson-embed-clients/watson_nlp/protos — zsh

The active tab (Tab 3) contains the following command and its output:

```
niklasheidloff@Niklass-MBP protos % grpcurl -plaintext -proto common-service.proto -d '{  
"raw_document": {  
"text": "It is so easy to embed Watson NLP in applications. Very cool"  
},  
"parsers": ["token"]  
}' -H 'mm-model-id: syntax_izumo_lang_en_stock' localhost:8085 watson.runtime.nlp.v1.NlpService.SyntaxPredict
```

protos — zsh — 145x37

```
...atson-automation/roks-new-nlp/output — com.docker.cli < launch.sh ...c port-forward svc/watson-nlp-embedded -n watson-demo 8085 ... ~git/bm-watson-embed-clients/watson_nlp/protos — zsh
```

```
        "end": 55,
        "text": "Very"
    },
},
{
    "span": {
        "begin": 56,
        "end": 60,
        "text": "cool"
    }
},
"sentences": [
{
    "span": {
        "end": 50,
        "text": "It is so easy to embed Watson NLP in applications."
    }
},
{
    "span": {
        "begin": 51,
        "end": 60,
        "text": "Very cool"
    }
},
],
"paragraphs": [
{
    "span": {
        "end": 60,
        "text": "It is so easy to embed Watson NLP in applications. Very cool"
    }
}
]
}
niklasheidloff@Niklass-MBP protos %
```

output — oc port-forward svc/watson-nlp-embedded -n watson-demo 8080 — 145x37

...atson-automation/roks-new-nlp/output — com.docker.cli < launch.sh ...oc port-forward svc/watson-nlp-embedded -n watson-demo 8080 ~/git/ibm-watson-embed-clients/watson_nlp/protos — zsh +

```
niklasheidloff@Niklass-MBP output % oc port-forward svc/$WATSON_SERVICE -n $YOUR_NAMESPACE 8085
Forwarding from 127.0.0.1:8085 -> 8085
Forwarding from [::1]:8085 -> 8085
Handling connection for 8085
^C
niklasheidloff@Niklass-MBP output % oc port-forward svc/$WATSON_SERVICE -n $YOUR_NAMESPACE 8080
Forwarding from 127.0.0.1:8080 -> 8080
Forwarding from [::1]:8080 -> 8080
```

```
protos -- zsh -- 145x37
...atson-automation/roks-new-nlp/output -- com.docker.cli - launch.sh ...c port-forward svc/watson-nlp-embedded -n watson-demo 8080 ... ~/git/ibm-watson-embed-clients/watson_nlp/protos -- zsh +
niklasheidloff@Niklass-MBP protos % curl -X POST "http://localhost:8080/v1/watson.runtime.nlp.v1/NlpService/SyntaxPredict" \
-H "accept: application/json" \
-H "grpc-metadata-mm-model-id: syntax_izumo_lang_en_stock" \
-H "content-type: application/json" \
-d " { \"rawDocument\": { \"text\": \"It is so easy to embed Watson NLP in applications. Very cool.\" }}"
[{"text":"It is so easy to embed Watson NLP in applications. Very cool.", "producerId":{"name":"Izumo Text Processing", "version":"0.0.1"}, "tokens":[{"span":{"begin":0, "end":2, "text":"It"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":3, "end":5, "text":"is"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":6, "end":8, "text":"so"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":9, "end":13, "text":"easy"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":14, "end":16, "text":"to"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":17, "end":22, "text":"embed"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":23, "end":29, "text":"Watson"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":30, "end":33, "text":"NLP"}, "lemma":"",
"partOfSpeech":"POS_UNSET", "dependency":null, "features":[]}, {"span":{"begin":34, "end":36, "text":"in"}, "lemma":"",
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niklasheidloff@Niklass-MBP protos %
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