



Reference

Ansible Automation Platform 2.7



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1 Reference

Ansible Automation Platform custom resources

The Ansible Automation Platform operator provides custom resources for deploying, backing up, and restoring a complete Ansible Automation Platform instance on OpenShift Container Platform.

The `AnsibleAutomationPlatform` custom resource is the top-level resource for deploying the platform. It manages all components, including automation controller, automation hub, Event-Driven Ansible, Ansible Lightspeed, and the platform gateway. Use this custom resource when you want the operator to manage the full platform deployment as a single unit.

The `AnsibleAutomationPlatformBackup` and `AnsibleAutomationPlatformRestore` custom resources manage data protection for the platform. A backup captures the state of all platform components and their databases. A restore recreates the platform from a previously created backup. You can configure backup settings globally or override them for individual components such as automation controller, automation hub, and Event-Driven Ansible.

AnsibleAutomationPlatform [aap.ansible.com/v1alpha1]

The `AnsibleAutomationPlatform` custom resource is the top-level resource for deploying and managing Ansible Automation Platform on OpenShift Container Platform. It configures all components, including automation controller, automation hub, Event-Driven Ansible, and the platform gateway.

Description

API Group	<code>aap.ansible.com</code>
API Version	<code>v1alpha1</code>
Kind	<code>AnsibleAutomationPlatform</code>
Scope	Namespaced

Specification

The top-level `spec` fields for the `AnsibleAutomationPlatform` custom resource.

Field	Type	Description	Default
<code>no_log</code>	Boolean	Development setting to enable additional logging output.	<code>false</code>
<code>image_pull_policy</code>	String	Image pull policy for all platform pods. Options: <code>Always</code> , <code>Never</code> , <code>IfNotPresent</code> .	<code>IfNotPresent</code>
<code>bundle_cacert_secret</code>	String	Name of a Kubernetes secret containing custom CA certificates to trust.	-
<code>redis_mode</code>	String	Redis deployment mode. Set to <code>cluster</code> to enable Redis cluster mode.	-
<code>api</code>	Object	Configuration for the platform gateway API pods. See See "spec.api" on page 6	-
<code>redis</code>	Object	Configuration for the platform Redis pods. See See "spec.redis" on page 7	-
<code>database</code>	Object	Configuration for the platform database. See See "spec.database" on page 7	-
<code>controller</code>	Object	Configuration for the automation controller component. See See "spec.controller" on page 7 .	-
<code>eda</code>	Object	Configuration for the Event-Driven Ansible component. See See "spec.eda" on page 8 .	-
<code>hub</code>	Object	Configuration for the automation hub component. See See "spec.hub" on page 10 .	-
<code>lightspeed</code>	Object	Configuration for the Ansible Lightspeed component. See See "spec.lightspeed" on page 11 .	-

spec.api

Configuration for the platform gateway API pods.

Field	Type	Description	Default
<code>replicas</code>	Integer	Number of gateway API pod replicas.	<code>1</code>

Field	Type	Description	Default
<code>resource_requirements</code>	Object	Kubernetes resource requests and limits for the gateway API pods. See See "Resource requirements object" on page 11.	See defaults table

spec.redis

Configuration for the platform Redis pods.

Field	Type	Description	Default
<code>replicas</code>	Integer	Number of Redis pod replicas.	1
<code>resource_requirements</code>	Object	Kubernetes resource requests and limits for the Redis pods. See See "Resource requirements object" on page 11.	See defaults table

spec.database

Configuration for the platform database.

Field	Type	Description	Default
<code>database_secret</code>	String	Name of a Kubernetes secret containing external database connection details. Required when using an external database instead of the operator-deployed database.	-
<code>resource_requirements</code>	Object	Kubernetes resource requests and limits for the operator-deployed database pod. Ignored when using an external database. See See "Resource requirements object" on page 11.	See defaults table

spec.controller

Configuration for the automation controller component.

Field	Type	Description	Default
<code>disabled</code>	Boolean	Set to <code>true</code> to disable the automation controller component.	<code>false</code>
<code>name</code>	String	Name of an existing <code>AutomationController</code> custom resource to register with the platform gateway.	-
<code>image_pull_policy</code>	String	Image pull policy for automation controller pods. Options: <code>Always</code> , <code>Never</code> , <code>IfNotPresent</code> .	<code>IfNotPresent</code>
<code>postgres_configuration_secret</code>	String	Name of a Kubernetes secret containing external PostgreSQL connection details for the automation controller database.	-
<code>route_tls_termination_mechanism</code>	String	TLS termination mechanism for the automation controller route.	-
<code>uwsgi_processes</code>	Integer	Number of uWSGI worker processes for the web pod.	<code>2</code>
<code>extra_settings</code>	Array	List of additional automation controller settings as name-value pairs.	-
<code>task_resource_requirements</code>	Object	Kubernetes resource requests and limits for the task pod. See See "Resource requirements object" on page 11.	See defaults table
<code>web_resource_requirements</code>	Object	Kubernetes resource requests and limits for the web pod. See See "Resource requirements object" on page 11.	See defaults table
<code>ee_resource_requirements</code>	Object	Kubernetes resource requests and limits for execution environment pods. See See "Resource requirements object" on page 11.	See defaults table
<code>redis_resource_requirements</code>	Object	Kubernetes resource requests and limits for the automation controller Redis pod. See See "Resource requirements object" on page 11.	See defaults table
<code>rsyslog_resource_requirements</code>	Object	Kubernetes resource requests and limits for the rsyslog pod. See See "Resource requirements object" on page 11.	See defaults table
<code>init_container_resource_requirements</code>	Object	Kubernetes resource requests and limits for init containers. See See "Resource requirements object" on page 11.	See defaults table

spec.eda

Configuration for the Event-Driven Ansible component.

Field	Type	Description	Default
<code>disabled</code>	Boolean	Set to <code>true</code> to disable the Event-Driven Ansible component.	<code>false</code>
<code>name</code>	String	Name of an existing <code>EDA</code> custom resource to register with the platform gateway.	-
<code>automation_server_url</code>	String	URL of the automation controller instance for Event-Driven Ansible to connect to.	-
<code>automation_server_ssl_verify</code>	String	Enable or disable SSL verification for the automation controller connection. Set to <code>no</code> to disable.	<code>yes</code>
<code>database</code>	Object	Database configuration. Contains <code>database_secret</code> (String) specifying the name of a Kubernetes secret with external database connection details.	-
<code>api</code>	Object	Event-Driven Ansible API pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>ui</code>	Object	Event-Driven Ansible UI pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>scheduler</code>	Object	Event-Driven Ansible scheduler pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>default_worker</code>	Object	Event-Driven Ansible default worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>activation_worker</code>	Object	Event-Driven Ansible activation worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>event_stream</code>	Object	Event-Driven Ansible event stream pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>worker</code>	Object	Event-Driven Ansible worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	2 replicas

spec.hub

Configuration for the automation hub component.

Field	Type	Description	Default
<code>disabled</code>	Boolean	Set to <code>true</code> to disable the automation hub component.	<code>false</code>
<code>name</code>	String	Name of an existing <code>AutomationHub</code> custom resource to register with the platform gateway.	-
<code>postgres_configuration_secret</code>	String	Name of a Kubernetes secret containing external PostgreSQL connection details for the automation hub database.	-
<code>storage_type</code>	String	Storage backend type for automation hub content. Options: <code>file</code> , <code>S3</code> , <code>azure</code> .	-
<code>file_storage_storage_class</code>	String	Kubernetes storage class for file-based storage. Must support <code>ReadWriteMany</code> access mode. Required when <code>storage_type</code> is <code>file</code> .	-
<code>file_storage_size</code>	String	Size of the persistent volume for file-based storage, for example <code>50Gi</code> . Required when <code>storage_type</code> is <code>file</code> .	-
<code>object_storage_s3_secret</code>	String	Name of a Kubernetes secret containing S3-compatible object storage credentials. Required when <code>storage_type</code> is <code>S3</code> .	-
<code>object_storage_azure_secret</code>	String	Name of a Kubernetes secret containing Azure Blob Storage credentials. Required when <code>storage_type</code> is <code>azure</code> .	-
<code>image_pull_policy</code>	String	Image pull policy for automation hub pods. Options: <code>Always</code> , <code>Never</code> , <code>IfNotPresent</code> .	<code>IfNotPresent</code>
<code>pulp_settings</code>	Object	Custom Pulp configuration settings as key-value pairs, for example <code>MAX_PAGE_SIZE</code> or <code>cache_enabled</code> .	-
<code>api</code>	Object	Automation hub API pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>content</code>	Object	Automation hub content pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica

Field	Type	Description	Default
<code>worker</code>	Object	Automation hub worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>web</code>	Object	Automation hub web pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>redis</code>	Object	Automation hub Redis pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica

spec.lightSpeed

Configuration for the Ansible Lightspeed component.

Field	Type	Description	Default
<code>disabled</code>	Boolean	Set to <code>true</code> to disable the Ansible Lightspeed component.	<code>true</code>
<code>database</code>	Object	Database configuration. Contains <code>database_secret</code> (String) specifying the name of a Kubernetes secret with external database connection details.	-
<code>auth_config_secret_name</code>	String	Name of a Kubernetes secret containing authentication configuration for Ansible Lightspeed.	-
<code>model_config_secret_name</code>	String	Name of a Kubernetes secret containing model configuration for Ansible Lightspeed.	-

Resource requirements object

All `resource_requirements` fields follow the standard Kubernetes resource specification pattern with `requests` and `limits`.

Field	Type	Description	Default
<code>requests.cpu</code>	String	Minimum CPU allocation for the pod, for example <code>100m</code> .	Varies by component
<code>requests.memory</code>	String	Minimum memory allocation for the pod, for example <code>256Mi</code> .	Varies by component

Field	Type	Description	Default
<code>limits.cpu</code>	String	Maximum CPU the pod can consume, for example <code>500m</code> .	Varies by component
<code>limits.memory</code>	String	Maximum memory the pod can consume, for example <code>1000Mi</code> .	Varies by component

Default resource requirements

The following table lists the default resource requests and limits for each component.

Component	CPU request	Memory request	CPU limit	Memory limit
<code>api (gateway)</code>	100m	256Mi	500m	1000Mi
<code>redis (platform)</code>	100m	256Mi	500m	500Mi
<code>database</code>	100m	256Mi	500m	800Mi
<code>controller.task</code>	100m	150Mi	1000m	1200Mi
<code>controller.web</code>	100m	200Mi	200m	1600Mi
<code>controller.ee</code>	100m	64Mi	1000m	500Mi
<code>controller.redis</code>	50m	64Mi	100m	200Mi
<code>controller.rsyslog</code>	100m	128Mi	500m	250Mi
<code>controller.init</code>	100m	128Mi	500m	200Mi
<code>eda.api</code>	50m	350Mi	500m	400Mi
<code>eda.ui</code>	25m	64Mi	500m	150Mi
<code>eda.scheduler</code>	50m	200Mi	500m	250Mi
<code>eda.worker</code>	25m	200Mi	250m	250Mi
<code>eda.default_worker</code>	25m	200Mi	500m	400Mi
<code>eda.activation_worker</code>	25m	150Mi	500m	400Mi
<code>eda.event_stream</code>	25m	150Mi	100m	300Mi
<code>hub.api</code>	150m	256Mi	800m	500Mi
<code>hub.content</code>	150m	256Mi	800m	1200Mi
<code>hub.worker</code>	150m	256Mi	800m	400Mi

Component	CPU request	Memory request	CPU limit	Memory limit
hub.web	100m	256Mi	500m	300Mi
hub.redis	100m	250Mi	300m	400Mi

Example custom resource

The following example shows a basic `AnsibleAutomationPlatform` custom resource with an external database, S3 storage for automation hub, and Event-Driven Ansible SSL verification disabled:

```

apiVersion: aap.ansible.com/v1alpha1
kind: AnsibleAutomationPlatform
metadata:
  name: aap
spec:
  database:
    database_secret: postgres-config-gateway
  eda:
    automation_server_ssl_verify: 'no'
  hub:
    storage_type: 's3'
    object_storage_s3_secret: 'example-galaxy-object-storage'

```

AnsibleAutomationPlatformBackup and AnsibleAutomationPlatformRestore [aap.ansible.com/v1alpha1]

The `AnsibleAutomationPlatformBackup` and `AnsibleAutomationPlatformRestore` custom resources manage backup and restore operations for your Ansible Automation Platform deployment on OpenShift Container Platform. You can configure global settings or override them per component.

AnsibleAutomationPlatformBackup

API Group	aap.ansible.com
API Version	v1alpha1
Kind	AnsibleAutomationPlatformBackup
Scope	Namespaced

AnsibleAutomationPlatformBackup spec

The `spec` fields for the `AnsibleAutomationPlatformBackup` custom resource.

Field	Type	Description	Default
<code>deployment_name</code>	String	Name of the <code>AnsibleAutomationPlatform</code> instance to back up. Required.	-
<code>no_log</code>	Boolean	Suppress logging of sensitive data during the backup process.	<code>true</code>
<code>backup_pvc</code>	String	Name of the persistent volume claim (PVC) to use for backup storage. This value applies globally to all components unless overridden.	-
<code>backup_storage_classes</code>	String	Kubernetes storage class for the backup PVC. Applies globally to the platform gateway. Components that do not specify their own <code>backup_storage_class</code> inherit this value.	-
<code>backup_storage_requirements</code>	String	Storage size for the backup PVC, for example <code>15Gi</code> .	-
<code>hub</code>	Object	Override backup settings for the automation hub component. See See "Component backup overrides" on page 15.	-
<code>controller</code>	Object	Override backup settings for the automation controller component. See See "Component backup overrides" on page 15.	-
<code>eda</code>	Object	Override backup settings for the Event-Driven Ansible component. See See "Component backup overrides" on page 15.	-

Component backup overrides

Each component section (`hub` , `controller` , `eda`) supports the following fields to override global backup settings.

Field	Type	Description	Default
<code>backup_pvc</code>	String	Name of the PVC for this component's backup. Overrides the global <code>backup_pvc</code> .	Inherited from global
<code>backup_storage_requirements</code>	String	Storage size for this component's backup PVC, for example <code>25Gi</code> .	Inherited from global
<code>backup_storage_classes</code>	String	Storage class for this component's backup PVC. Overrides the global <code>backup_storage_class</code> .	Inherited from global
<code>create_backup_pvc</code>	Boolean	Set to <code>true</code> to have the operator create the PVC automatically.	<code>false</code>
<code>no_log</code>	Boolean	Suppress logging of sensitive data for this component. Overrides the global <code>no_log</code> .	Inherited from global

Example backup custom resource

The following example shows a backup custom resource with per-component overrides for PVC names, storage sizes, and storage classes:

```

apiVersion: aap.ansible.com/v1alpha1
kind: AnsibleAutomationPlatformBackup
metadata:
  name: custom-backup
spec:
  deployment_name: myaap
  no_log: false
  backup_storage_class: rook-cephfs
hub:
  backup_pvc: custom-hub-backup-pvc
  backup_storage_requirements: 25Gi
  backup_storage_class: rook-cephfs
  create_backup_pvc: true
  no_log: false
controller:
  backup_pvc: custom-controller-backup-pvc
  backup_storage_requirements: 15Gi
  backup_storage_class: rook-block
  create_backup_pvc: true
  no_log: false
eda:
  backup_pvc: custom-eda-backup-pvc
  backup_storage_requirements: 7Gi
  backup_storage_class: rook-block
  create_backup_pvc: true
  no_log: false

```

AnsibleAutomationPlatformRestore

API Group	aap.ansible.com
API Version	v1alpha1
Kind	AnsibleAutomationPlatformRestore
Scope	Namespaced

AnsibleAutomationPlatformRestore spec

The `spec` fields for the `AnsibleAutomationPlatformRestore` custom resource.

Field	Type	Description	Default
<code>deployment_name</code>	String	Name of the <code>AnsibleAutomationPlatform</code> instance to restore. Required.	-
<code>backup_name</code>	String	Name of the <code>AnsibleAutomationPlatformBackup</code> resource to restore from. Required.	-
<code>no_log</code>	Boolean	Suppress logging of sensitive data during the restore process.	<code>true</code>

Example restore custom resource

```

apiVersion: aap.ansible.com/v1alpha1
kind: AnsibleAutomationPlatformRestore
metadata:
  name: restore-myaap
spec:
  deployment_name: myaap
  backup_name: custom-backup

```

Automation controller custom resources

The automation controller operator provides custom resources for deploying, configuring, and protecting a standalone automation controller instance on OpenShift Container Platform.

The `AutomationController` custom resource deploys and configures automation controller independently of the full Ansible Automation Platform deployment. Use this custom resource when you need to manage automation controller as a standalone component rather than through the `AnsibleAutomationPlatform` resource.

The `AutomationControllerMeshIngress` custom resource creates a mesh ingress hop node inside the OpenShift cluster. This enables remote execution nodes outside the cluster to connect to automation controller through the automation mesh network.

The `AutomationControllerBackup` and `AutomationControllerRestore` custom resources manage data protection for standalone automation controller deployments. A backup captures the controller database and configuration. A restore recreates the controller from a previously created backup.

AutomationController and AutomationControllerMeshIngress [automationcontroller.ansible.com]

The `AutomationController` custom resource deploys and configures a standalone automation controller instance. The `AutomationControllerMeshIngress` custom resource creates a mesh ingress hop node inside the OpenShift cluster for automation mesh connectivity.

AutomationController

API Group	<code>automationcontroller.ansible.com</code>
API Version	<code>v1beta1</code>
Kind	<code>AutomationController</code>
Scope	Namespaced

AutomationController spec

The `spec` fields for the `AutomationController` custom resource.

Field	Type	Description	Default
<code>image_pull_policy</code>	String	Image pull policy for automation controller pods. Options: <code>Always</code> , <code>Never</code> , <code>IfNotPresent</code> .	<code>IfNotPresent</code>
<code>postgres_configuration_secret</code>	String	Name of a Kubernetes secret containing external PostgreSQL connection details for the automation controller database.	-
<code>route_tls_termination_mechanism</code>	String	TLS termination mechanism for the automation controller route.	-

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Field	Type	Description	Default
<code>uwsgi_processes</code>	Integer	Number of uWSGI worker processes for the web pod.	2
<code>termination_grace_period_seconds</code>	Integer	Grace period in seconds for running jobs to complete before the pod terminates.	-
<code>ee_extra_env</code>	String	Extra environment variables to pass to execution environment pods.	-
<code>extra_settings</code>	Array	List of additional automation controller settings as name-value pairs.	-
<code>task_affinity</code>	Object	Kubernetes pod affinity rules for the task pod.	-
<code>web_affinity</code>	Object	Kubernetes pod affinity rules for the web pod.	-
<code>task_resource_requirements</code>	Object	Kubernetes resource requests and limits for the task pod.	cpu: 100m/ 1000m, memory: 150Mi/ 1200Mi
<code>web_resource_requirements</code>	Object	Kubernetes resource requests and limits for the web pod.	cpu: 100m/ 200m, memory: 200Mi/ 1600Mi
<code>ee_resource_requirements</code>	Object	Kubernetes resource requests and limits for execution environment pods.	cpu: 100m/ 1000m, memory: 64Mi/ 500Mi
<code>redis_resource_requirements</code>	Object	Kubernetes resource requests and limits for the automation controller Redis pod.	cpu: 50m/ 100m, memory: 64Mi/ 200Mi
<code>rsyslog_resource_requirements</code>	Object	Kubernetes resource requests and limits for the rsyslog pod.	cpu: 100m/ 500m, memory: 128Mi/ 250Mi
<code>init_container_resource_requirements</code>	Object	Kubernetes resource requests and limits for init containers.	cpu: 100m/ 500m, memory: 128Mi/ 200Mi

Example AutomationController custom resource

```

apiVersion: automationcontroller.ansible.com/v1beta1
kind: AutomationController
metadata:
  name: my-controller
spec:
  uwsgi_processes: 4
  task_resource_requirements:
    requests:
      cpu: 200m
      memory: 512Mi
    limits:
      cpu: 2000m
      memory: 2Gi
  web_resource_requirements:
    requests:
      cpu: 200m
      memory: 512Mi
    limits:
      cpu: 1000m
      memory: 2Gi

```

AutomationControllerMeshIngress

API Group	automationcontroller.ansible.com
API Version	v1alpha1
Kind	AutomationControllerMeshIngress
Scope	Namespaced

AutomationControllerMeshIngress spec

The `spec` fields for the `AutomationControllerMeshIngress` custom resource.

Field	Type	Description	Default
<code>deployment_name</code>	String	Name of the <code>AutomationController</code> instance to attach the mesh ingress to. Required. Must be in the same namespace as the mesh ingress resource.	-

Example

AutomationControllerMeshIngress custom resource

```

apiVersion: automationcontroller.ansible.com/v1alpha1
kind: AutomationControllerMeshIngress
metadata:
  name: my-mesh-ingress
  namespace: aap
spec:
  deployment_name: my-controller

```

AutomationControllerBackup and AutomationControllerRestore [automationcontroller.ansible.com]

The `AutomationControllerBackup` and `AutomationControllerRestore` custom resources manage backup and restore operations for standalone automation controller deployments.

AutomationControllerBackup

API Group	automationcontroller.ansible.com
API Version	v1beta1
Kind	AutomationControllerBackup
Scope	Namespaced

AutomationControllerBackup spec

Field	Type	Description	Default
deployment_name	String	Name of the AutomationController instance to back up. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the backup process.	true
backup_pvc	String	Name of the persistent volume claim (PVC) to use for backup storage.	-
backup_storage_classes	String	Kubernetes storage class for the backup PVC.	-
backup_storage_requirements	String	Storage size for the backup PVC, for example 15Gi .	-
create_backup_pvc	Boolean	Set to true to have the operator create the PVC automatically.	false

Example AutomationControllerBackup custom resource

```

apiVersion: automationcontroller.ansible.com/v1beta1
kind: AutomationControllerBackup
metadata:
  name: controller-backup
spec:
  deployment_name: my-controller
  backup_pvc: controller-backup-pvc
  backup_storage_requirements: 15Gi
  create_backup_pvc: true

```

AutomationControllerRestore

API Group	automationcontroller.ansible.com
API Version	v1beta1
Kind	AutomationControllerRestore
Scope	Namespaced

AutomationControllerRestore spec

Field	Type	Description	Default
deployment_name	String	Name of the AutomationController instance to restore. Required.	-
backup_name	String	Name of the AutomationControllerBackup resource to restore from. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the restore process.	true

Example AutomationControllerRestore custom resource

```
apiVersion: automationcontroller.ansible.com/v1beta1
kind: AutomationControllerRestore
metadata:
  name: controller-restore
spec:
  deployment_name: my-controller
  backup_name: controller-backup
```

Automation hub custom resources

The automation hub operator provides custom resources for deploying, configuring, and protecting a standalone automation hub instance on OpenShift Container Platform.

The `AutomationHub` custom resource deploys and configures automation hub independently of the full Ansible Automation Platform deployment. Automation hub provides a centralized location for managing Ansible content collections, execution environments, and container images. Use this custom resource when you need to manage automation hub as a standalone component rather than through the `AnsibleAutomationPlatform` resource.

The `AutomationHubBackup` and `AutomationHubRestore` custom resources manage data protection for standalone automation hub deployments. A backup captures the hub database, content, and configuration. A restore recreates the hub from a previously created backup.

AutomationHub [automationhub.ansible.com/v1beta1]

The `AutomationHub` custom resource deploys and configures a standalone automation hub instance for managing Ansible content collections, execution environments, and container images.

Description

API Group	automationhub.ansible.com
API Version	v1beta1
Kind	AutomationHub
Scope	Namespaced

Specification

Field	Type	Description	Default
image_pull_policy	String	Image pull policy for automation hub pods. Options: Always , Never , IfNotPresent .	IfNotPresent
postgres_configuration_secret	String	Name of a Kubernetes secret containing external PostgreSQL connection details for the automation hub database.	-
storage_type	String	Storage backend type for automation hub content. Options: file , S3 , azure .	-
file_storage_storage_class	String	Kubernetes storage class for file-based storage. Must support ReadWriteMany access mode. Required when storage_type is file .	-
file_storage_size	String	Size of the persistent volume for file-based storage, for example 50Gi . Required when storage_type is file .	-
object_storage_s3_secret	String	Name of a Kubernetes secret containing S3-compatible object storage credentials. Required when storage_type is S3 .	-
object_storage_azure_secret	String	Name of a Kubernetes secret containing Azure Blob Storage credentials. Required when storage_type is azure .	-
pulp_settings	Object	Custom Pulp configuration settings as key-value pairs, for example MAX_PAGE_SIZE or cache_enabled .	-
api	Object	Automation hub API pod configuration. Contains replicas (Integer) and resource_requirements (Object).	1 replica

Field	Type	Description	Default
<code>content</code>	Object	Automation hub content pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>worker</code>	Object	Automation hub worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>web</code>	Object	Automation hub web pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>redis</code>	Object	Automation hub Redis pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica

Example custom resource

```

apiVersion: automationhub.ansible.com/v1beta1
kind: AutomationHub
metadata:
  name: my-hub
spec:
  storage_type: S3
  object_storage_s3_secret: my-s3-secret
  pulp_settings:
    MAX_PAGE_SIZE: 501
    cache_enabled: true
  api:
    replicas: 2
  content:
    replicas: 2

```

AutomationHubBackup and AutomationHubRestore

[automationhub.ansible.com/v1beta1]

The `AutomationHubBackup` and `AutomationHubRestore` custom resources manage backup and restore operations for standalone automation hub deployments.

AutomationHubBackup

API Group	automationhub.ansible.com
API Version	v1beta1
Kind	AutomationHubBackup
Scope	Namespaced

AutomationHubBackup spec

Field	Type	Description	Default
deployment_name	String	Name of the <code>AutomationHub</code> instance to back up. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the backup process.	true
backup_pvc	String	Name of the persistent volume claim (PVC) to use for backup storage.	-
backup_storage_classes	String	Kubernetes storage class for the backup PVC.	-
backup_storage_requirements	String	Storage size for the backup PVC, for example 15Gi .	-
create_backup_pvc	Boolean	Set to <code>true</code> to have the operator create the PVC automatically.	false

Example AutomationHubBackup custom resource

```

apiVersion: automationhub.ansible.com/v1beta1
kind: AutomationHubBackup
metadata:
  name: hub-backup
spec:
  deployment_name: my-hub
  backup_pvc: hub-backup-pvc
  backup_storage_requirements: 25Gi
  create_backup_pvc: true

```

AutomationHubRestore

API Group	automationhub.ansible.com
API Version	v1beta1
Kind	AutomationHubRestore
Scope	Namespaced

AutomationHubRestore spec

Field	Type	Description	Default
deployment_name	String	Name of the AutomationHub instance to restore. Required.	-
backup_name	String	Name of the AutomationHubBackup resource to restore from. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the restore process.	true

Example AutomationHubRestore custom resource

```

apiVersion: automationhub.ansible.com/v1beta1
kind: AutomationHubRestore
metadata:
  name: hub-restore
spec:
  deployment_name: my-hub
  backup_name: hub-backup

```

Ansible Lightspeed custom resources

The Ansible Lightspeed operator provides a custom resource for deploying and configuring the Ansible Lightspeed AI assistant service on OpenShift Container Platform.

The `AnsibleLightspeed` custom resource deploys and configures Ansible Lightspeed independently of the full Ansible Automation Platform deployment. Ansible Lightspeed provides AI-powered assistance for Ansible content creation. Use this custom resource when you need to manage Ansible Lightspeed as a standalone component rather than through the `AnsibleAutomationPlatform` resource.

AnsibleLightspeed [lightspeed.ansible.com/v1alpha1]

The `AnsibleLightspeed` custom resource deploys and configures the Ansible Lightspeed AI assistant service.

Description

API Group	<code>lightspeed.ansible.com</code>
API Version	<code>v1alpha1</code>

Kind	AnsibleLightspeed
Scope	Namespaced

Specification

Field	Type	Description	Default
disabled	Boolean	Set to <code>true</code> to disable the Ansible Lightspeed component.	<code>true</code>
database	Object	Database configuration. Contains <code>database_secret</code> (String) specifying the name of a Kubernetes secret with external database connection details.	-
auth_config_secret_name	String	Name of a Kubernetes secret containing authentication configuration for Ansible Lightspeed.	-
model_config_secret_name	String	Name of a Kubernetes secret containing model configuration for Ansible Lightspeed.	-

Example custom resource

```

apiVersion: lightspeed.ansible.com/v1alpha1
kind: AnsibleLightspeed
metadata:
  name: my-lightspeed
spec:
  disabled: false
  auth_config_secret_name: lightspeed-auth-config
  model_config_secret_name: lightspeed-model-config
  database:
    database_secret: lightspeed-db-secret

```

Event-Driven Ansible custom resources

The Event-Driven Ansible operator provides custom resources for deploying, configuring, and protecting a standalone Event-Driven Ansible instance on OpenShift Container Platform.

The `EDA` custom resource deploys and configures Event-Driven Ansible independently of the full Ansible Automation Platform deployment. Event-Driven Ansible enables event-driven automation workflows by connecting event sources to automation actions. Use this custom resource when you need to manage Event-Driven Ansible as a standalone component rather than through the `AnsibleAutomationPlatform` resource.

The `EDABackup` and `EDARestore` custom resources manage data protection for standalone Event-Driven Ansible deployments. A backup captures the Event-Driven Ansible database and configuration. A restore recreates the deployment from a previously created backup.

EDA [eda.ansible.com/v1alpha1]

The `EDA` custom resource deploys and configures a standalone Event-Driven Ansible instance for event-driven automation workflows.

Description

API Group	<code>eda.ansible.com</code>
API Version	<code>v1alpha1</code>
Kind	<code>EDA</code>
Scope	Namespaced

Specification

Field	Type	Description	Default
<code>automation_server_url</code>	String	URL of the automation controller instance for Event-Driven Ansible to connect to.	-
<code>automation_server_ssl_verify</code>	String	Enable or disable SSL verification for the automation controller connection. Set to <code>no</code> to disable.	<code>yes</code>

Field	Type	Description	Default
<code>database</code>	Object	Database configuration. Contains <code>database_secret</code> (String) specifying the name of a Kubernetes secret with external database connection details.	-
<code>api</code>	Object	Event-Driven Ansible API pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>ui</code>	Object	Event-Driven Ansible UI pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>scheduler</code>	Object	Event-Driven Ansible scheduler pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>default_worker</code>	Object	Event-Driven Ansible default worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>activation_worker</code>	Object	Event-Driven Ansible activation worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>event_stream</code>	Object	Event-Driven Ansible event stream pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	1 replica
<code>worker</code>	Object	Event-Driven Ansible worker pod configuration. Contains <code>replicas</code> (Integer) and <code>resource_requirements</code> (Object).	2 replicas

Example custom resource

```

apiVersion: eda.ansible.com/v1alpha1
kind: EDA
metadata:
  name: my-eda
spec:
  automation_server_ssl_verify: 'no'
  api:
    replicas: 2
  activation_worker:
    replicas: 2
  event_stream:
    replicas: 2

```

EDABackup and EDARestore [eda.ansible.com/v1alpha1]

The `EDABackup` and `EDARestore` custom resources manage backup and restore operations for standalone Event-Driven Ansible deployments.

EDABackup

API Group	eda.ansible.com
API Version	v1alpha1
Kind	EDABackup
Scope	Namespaced

EDABackup spec

Field	Type	Description	Default
deployment_name	String	Name of the EDA instance to back up. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the backup process.	true
backup_pvc	String	Name of the persistent volume claim (PVC) to use for backup storage.	-
backup_storage_classes	String	Kubernetes storage class for the backup PVC.	-
backup_storage_requirements	String	Storage size for the backup PVC, for example 7Gi .	-
create_backup_pvc	Boolean	Set to true to have the operator create the PVC automatically.	false

Example EDABackup custom resource

```

apiVersion: eda.ansible.com/v1alpha1
kind: EDABackup
metadata:
  name: eda-backup
spec:
  deployment_name: my-eda
  backup_pvc: eda-backup-pvc
  backup_storage_requirements: 7Gi
  create_backup_pvc: true

```

EDARestore

API Group	eda.ansible.com
API Version	v1alpha1

Kind	EDARestore
Scope	Namespaced

EDARestore spec

Field	Type	Description	Default
deployment_name	String	Name of the EDA instance to restore. Required.	-
backup_name	String	Name of the EDABackup resource to restore from. Required.	-
no_log	Boolean	Suppress logging of sensitive data during the restore process.	true

Example EDARestore custom resource

```

apiVersion: eda.ansible.com/v1alpha1
kind: EDARestore
metadata:
  name: eda-restore
spec:
  deployment_name: my-eda
  backup_name: eda-backup

```

Resource Operator custom resources

The Resource Operator provides custom resources that enable you to manage automation controller resources directly from your Kubernetes cluster using a declarative, GitOps-compatible workflow.

Resource Operator custom resources connect to the platform gateway to create and manage automation resources such as jobs, templates, projects, inventories, credentials, schedules, and workflows. All Resource Operator custom resources require a `connection_secret` that references a Kubernetes secret containing the platform gateway URL and an OAuth2 token.

By defining automation resources as Kubernetes custom resources, you can manage them alongside your other cluster resources using standard Kubernetes tools and practices, including version control and continuous delivery pipelines.

Resource Operator custom resources [tower.ansible.com/v1alpha1]

The Resource Operator custom resources enable you to manage automation controller resources directly from your Kubernetes cluster. These custom resources connect to the platform gateway to create and manage jobs, templates, projects, inventories, credentials, schedules, and workflows.

Connection secret

All Resource Operator custom resources require a `connection_secret` field that references a Kubernetes secret containing the platform gateway URL and an OAuth2 token. Create this secret before using any Resource Operator custom resources.

```
apiVersion: v1
kind: Secret
metadata:
  name: aap-access
  type: Opaque
stringData:
  token: <generated-token>
  host: https://my-aap-gateway.example.com/
```

AnsibleJob

Launches a job or workflow job template on the automation controller instance specified in the connection secret.

Field	Type	Description	Default
<code>connection_secret</code>	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-

Field	Type	Description	Default
<code>job_template_name</code>	String	Name of the job template to launch. Specify either this or <code>workflow_template_name</code> .	-
<code>workflow_template_name</code>	String	Name of the workflow job template to launch. Specify either this or <code>job_template_name</code> .	-
<code>inventory</code>	String	Name of the inventory to use. Prompt on launch must be enabled on the template.	-
<code>extra_vars</code>	Object	Extra variables to pass to the job as key-value pairs. Prompt on launch must be enabled on the template.	-
<code>job_tags</code>	String	Comma-separated list of tags to run, for example <code>"provision,install,configuration"</code> .	-
<code>skip_tags</code>	String	Comma-separated list of tags to skip, for example <code>"configuration,restart"</code> .	-
<code>runner_image</code>	String	Container image for the runner pod.	-
<code>runner_version</code>	String	Version of the runner image to use.	-
<code>job_ttl</code>	Integer	Time to live in seconds for the job resource after completion.	-

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleJob
metadata:
  generateName: demo-job-1
spec:
  connection_secret: aap-access
  job_template_name: Demo Job Template
  inventory: Demo Inventory
  extra_vars:
    test_var: test
  job_tags: "provision,install"

```

JobTemplate

Creates a job template on the automation controller.

Field	Type	Description	Default
connection_secret	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
job_template_name	String	Name of the job template to create.	-
job_template_project	String	Name of the project to associate with the job template.	-
job_template_playbook	String	Name of the playbook file to run.	-
job_template_inventory	String	Name of the inventory to associate with the job template.	-

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: JobTemplate
metadata:
  name: jobtemplate-4
spec:
  connection_secret: aap-access
  job_template_name: ExampleJobTemplate4
  job_template_project: Demo Project
  job_template_playbook: hello_world.yml
  job_template_inventory: Demo Inventory

```

AnsibleProject

Creates a project (a logical collection of Ansible playbooks) on the automation controller.

Field	Type	Description	Default
connection_secret	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
repo	String	URL of the source control repository.	-
branch	String	Branch of the source control repository to use.	-
name	String	Display name for the project in the automation controller.	-
scm_type	String	Source control type, for example git .	-
organization	String	Organization the project belongs to.	-
description	String	Description of the project.	-
runner_pull_policy	String	Image pull policy for the runner pod. Options: Always , Never , IfNotPresent .	IfNotPresent

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleProject
metadata:
  name: git
spec:
  connection_secret: aap-access
  repo: https://github.com/ansible/ansible-tower-samples
  branch: main
  name: ProjectDemo-git
  scm_type: git
  organization: Default

```

AnsibleInventory

Creates an inventory on the automation controller.

Field	Type	Description	Default
<code>connection_secret</code>	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
<code>name</code>	String	Display name for the inventory.	-
<code>description</code>	String	Description of the inventory.	-
<code>organization</code>	String	Organization the inventory belongs to.	-
<code>state</code>	String	Desired state of the inventory. Options: <code>present</code> , <code>absent</code> .	<code>present</code>
<code>instance_groups</code>	Array	List of instance groups to associate with the inventory.	-
<code>variables</code>	Object	Inventory variables as key-value pairs. Supports strings, booleans, numbers, lists, and nested objects.	-

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleInventory
metadata:
  name: inventory-new
spec:
  connection_secret: aap-access
  name: newinventory
  organization: Default
  state: present
  variables:
    env: production
    region: us-east-1

```

AnsibleCredential

Creates a credential on the automation controller for authenticating with external systems.

Field	Type	Description	Default
connection_secret	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
name	String	Display name for the credential.	-
organization	String	Organization the credential belongs to.	-
description	String	Description of the credential.	-
type	String	Credential type, for example Machine , Amazon Web Services .	-
ssh_username	String	SSH username for Machine type credentials.	-
ssh_secret	String	Name of a Kubernetes secret containing the SSH private key for Machine type credentials.	-
username_secret	String	Name of a Kubernetes secret containing the username for cloud credentials.	-
password_secret	String	Name of a Kubernetes secret containing the password for cloud credentials.	-
runner_pull_policy	String	Image pull policy for the runner pod.	IfNotPresent

Example (SSH):

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleCredential
metadata:
  name: ssh-cred
spec:
  connection_secret: aap-access
  name: ssh-cred
  organization: Default
  type: "Machine"
  ssh_username: "ansible"
  ssh_secret: my-ssh-secret

```

AnsibleSchedule

Creates a schedule on the automation controller to run a job template at specified intervals.

Field	Type	Description	Default
<code>connection_secret</code>	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
<code>name</code>	String	Display name for the schedule.	-
<code>rrule</code>	String	Recurrence rule in iCalendar RRULE format defining the schedule, for example DTSTART:20210101T000000Z RRULE:FREQ=DAILY;INTERVAL=1;COUNT=1 .	-
<code>unified_job_template</code>	String	Name of the job template or workflow to schedule.	-
<code>runner_pull_policy</code>	String	Image pull policy for the runner pod.	IfNotPresent

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleSchedule
metadata:
  name: schedule
spec:
  connection_secret: aap-access
  name: "Demo Schedule"
  rrule: "DTSTART:20210101T000000Z RRULE:FREQ=DAILY;INTERVAL=1;COUNT=1"
  unified_job_template: "Demo Job Template"

```

AnsibleWorkflow

Creates a workflow on the automation controller.

Field	Type	Description	Default
connection_secret	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
workflow_template_name	String	Name of the workflow template.	-
inventory	String	Name of the inventory to associate with the workflow.	-
runner_pull_policy	String	Image pull policy for the runner pod.	IfNotPresent

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleWorkflow
metadata:
  name: workflow
spec:
  connection_secret: aap-access
  workflow_template_name: Demo Job Template
  inventory: Demo Inventory

```

WorkflowTemplate

Creates a workflow job template that links together a sequence of job templates on the automation controller.

Field	Type	Description	Default
connection_secret	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-
name	String	Display name for the workflow template.	-
description	String	Description of the workflow template.	-
organization	String	Organization the workflow template belongs to.	-
inventory	String	Default inventory for the workflow template.	-

Field	Type	Description	Default
<code>workflow_nodes</code>	Array	List of workflow nodes defining the sequence of jobs. Each node contains an <code>identifier</code> and a <code>unified_job_template</code> object with <code>name</code> , <code>type</code> , and <code>inventory</code> fields.	-

Example:

```

apiVersion: tower.ansible.com/v1alpha1
kind: WorkflowTemplate
metadata:
  name: workflowtemplate-sample
spec:
  connection_secret: aap-access
  name: ExampleWorkflow
  organization: Default
  inventory: Demo Inventory
  workflow_nodes:
  - identifier: node101
    unified_job_template:
      name: Demo Job Template
      type: job_template
  - identifier: node102
    unified_job_template:
      name: Demo Job Template
      type: job_template

```

AnsibleInstanceGroup

Creates an instance group on the automation controller for organizing and managing execution capacity.

Field	Type	Description	Default
<code>connection_secret</code>	String	Name of the Kubernetes secret containing the platform gateway connection details. Required.	-

REFERENCE

Field	Type	Description	Default
name	String	Display name for the instance group.	-
runner_pull_policy	String	Image pull policy for the runner pod.	IfNotPresent

Example:

```
apiVersion: tower.ansible.com/v1alpha1
kind: AnsibleInstanceGroup
metadata:
  name: my-instance-group
spec:
  connection_secret: aap-access
  name: production-instances
```

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