



# Schedule

## Astra Automation

NetApp  
December 01, 2023

# Inhalt

- Schedule ..... 1
  - Schedule overview ..... 1
  - Create a new schedule for an app ..... 1
  - List the schedules for an app ..... 17
  - Retrieve a schedule ..... 28
  - Modify a schedule ..... 37
  - Delete a schedule ..... 48

# Schedule

## Schedule overview

The Schedule API allows various scheduled data protection operations to be defined.

## Create a new schedule for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules

Indicates desired values for the Schedule API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource

### Request Body

Indicates desired values for the Schedule API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-schedule"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li><li>"1.3"</li></ul>

Name	Type	Required	Description
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	False	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active If not specified, the default value is "true".</li> </ul>
granularity	string	True	JSON string indicating the granularity of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	False	JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Defined regex is: "<code>^[0-9][1-5][0-9]\$</code>" This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</li> </ul>

Name	Type	Required	Description
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$" </code>  This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-7]\$" </code>  This field is only present if granularity is set to "weekly".</li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]\$" </code>  This field is only present if granularity is set to "monthly".</li> </ul>

Name	Type	Required	Description
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>

Name	Type	Required	Description
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule triggers AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication If not specified, the default value is "false".</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Response

Status: 201, Returns the newly created schedule resource in the JSON response body.



Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-schedule"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active If not specified, the default value is "true".</li> </ul>

Name	Type	Required	Description
granularity	string	True	<p>JSON string indicating the granularity of the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "<code>^[0-9][1-5][0-9]\$</code>" This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "<code>^[0-9][1][0-9][2][0-3]\$</code>" This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>

Name	Type	Required	Description
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-7]\$" This field is only present if granularity is set to "weekly".</code></li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-9]  [1-2][0-9]  [3][0-1]\$" This field is only present if granularity is set to "monthly".</code></li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>

Name	Type	Required	Description
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*)\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*)\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicate	string	False	<p>JSON string indicating if the schedule triggers AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication</li> </ul> <p>If not specified, the default value is "false".</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "id": "49cbc480-5f7d-51e2-8f30-52b9a83a03b1",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```



## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

# List the schedules for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name,granularity</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">schedule_1.3_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-schedules",
  "version": "1.3",
  "items": [
    [
      "0d6d20d6-8b7c-498a-b57b-5734210c209a",
      "Backup Schedule",
      "monthly"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

schedule\_1.3\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-schedule"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li></ul>



Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active If not specified, the default value is "true".</li> </ul>
granularity	string	True	JSON string indicating the granularity of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>

Name	Type	Required	Description
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-9][1-5][0-9]\$" This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</code></li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$" This field is present if granularity is set to "daily", "weekly", or "monthly".</code></li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-7]\$" This field is only present if granularity is set to "weekly".</code></li> </ul>

Name	Type	Required	Description
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]\$" This field is only present if granularity is set to "monthly".</code></li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$" This field is only present if granularity is set to "custom".</code></li> </ul>

Name	Type	Required	Description
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*)\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule triggers AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication. If not specified, the default value is "false".</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Retrieve a schedule

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Returns the stored Schedule API resource in the JSON response body.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

## Response

Status: 200, Returns the stored Schedule API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-schedule"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li><li>"1.3"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active If not specified, the default value is "true".</li> </ul>
granularity	string	True	JSON string indicating the granularity of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>

Name	Type	Required	Description
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$" This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</code></li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$" This field is present if granularity is set to "daily", "weekly", or "monthly".</code></li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-7]\$" This field is only present if granularity is set to "weekly".</code></li> </ul>



Name	Type	Required	Description
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]"</code> This field is only present if granularity is set to "monthly".</li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>

Name	Type	Required	Description
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*)\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule triggers AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication If not specified, the default value is "false".</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "id": "49cbc480-5f7d-51e2-8f30-52b9a83a03b1",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a schedule

PUT /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-schedule"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> <li>"1.3"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> </ul>



Name	Type	Required	Description
enabled	string	False	<p>JSON string indicating if a schedule is active. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active If not specified, the default value is "true".</li> </ul>
granularity	string	False	<p>JSON string indicating the granularity of the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	False	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "<code>^[0-9][1-5][0-9]\$</code>" This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</li> </ul>

Name	Type	Required	Description
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$" </code>  This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[0-7]\$" </code>  This field is only present if granularity is set to "weekly".</li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]\$" </code>  This field is only present if granularity is set to "monthly".</li> </ul>

Name	Type	Required	Description
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>

Name	Type	Required	Description
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule triggers AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication If not specified, the default value is "false".</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "granularity": "daily",
  "minute": "0",
  "hour": "0",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Response

Status: 204, Indicates if the schedule resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

# Delete a schedule

DELETE /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Removes the specified Schedule API resource.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

## Response

Status: 204, Indicates if the schedule resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Copyright-Informationen

Copyright © 2023 NetApp. Alle Rechte vorbehalten. Gedruckt in den USA. Dieses urheberrechtlich geschützte Dokument darf ohne die vorherige schriftliche Genehmigung des Urheberrechtinhabers in keiner Form und durch keine Mittel – weder grafische noch elektronische oder mechanische, einschließlich Fotokopieren, Aufnehmen oder Speichern in einem elektronischen Abrufsystem – auch nicht in Teilen, vervielfältigt werden.

Software, die von urheberrechtlich geschütztem NetApp Material abgeleitet wird, unterliegt der folgenden Lizenz und dem folgenden Haftungsausschluss:

DIE VORLIEGENDE SOFTWARE WIRD IN DER VORLIEGENDEN FORM VON NETAPP ZUR VERFÜGUNG GESTELLT, D. H. OHNE JEGLICHE EXPLIZITE ODER IMPLIZITE GEWÄHRLEISTUNG, EINSCHLIESSLICH, JEDOCH NICHT BESCHRÄNKT AUF DIE STILLSCHWEIGENDE GEWÄHRLEISTUNG DER MARKTGÄNGIGKEIT UND EIGNUNG FÜR EINEN BESTIMMTEN ZWECK, DIE HIERMIT AUSGESCHLOSSEN WERDEN. NETAPP ÜBERNIMMT KEINERLEI HAFTUNG FÜR DIREKTE, INDIREKTE, ZUFÄLLIGE, BESONDERE, BEISPIELHAFT SCHÄDEN ODER FOLGESCHÄDEN (EINSCHLIESSLICH, JEDOCH NICHT BESCHRÄNKT AUF DIE BESCHAFFUNG VON ERSATZWAREN ODER -DIENSTLEISTUNGEN, NUTZUNGS-, DATEN- ODER GEWINNVERLUSTE ODER UNTERBRECHUNG DES GESCHÄFTSBETRIEBS), UNABHÄNGIG DAVON, WIE SIE VERURSACHT WURDEN UND AUF WELCHER HAFTUNGSTHEORIE SIE BERUHEN, OB AUS VERTRAGLICH FESTGELEGTER HAFTUNG, VERSCHULDENSUNABHÄNGIGER HAFTUNG ODER DELIKTSHAFTUNG (EINSCHLIESSLICH FAHRLÄSSIGKEIT ODER AUF ANDEREM WEGE), DIE IN IRGEND EINER WEISE AUS DER NUTZUNG DIESER SOFTWARE RESULTIEREN, SELBST WENN AUF DIE MÖGLICHKEIT DERARTIGER SCHÄDEN HINGEWIESEN WURDE.

NetApp behält sich das Recht vor, die hierin beschriebenen Produkte jederzeit und ohne Vorankündigung zu ändern. NetApp übernimmt keine Verantwortung oder Haftung, die sich aus der Verwendung der hier beschriebenen Produkte ergibt, es sei denn, NetApp hat dem ausdrücklich in schriftlicher Form zugestimmt. Die Verwendung oder der Erwerb dieses Produkts stellt keine Lizenzierung im Rahmen eines Patentrechts, Markenrechts oder eines anderen Rechts an geistigem Eigentum von NetApp dar.

Das in diesem Dokument beschriebene Produkt kann durch ein oder mehrere US-amerikanische Patente, ausländische Patente oder anhängige Patentanmeldungen geschützt sein.

ERLÄUTERUNG ZU „RESTRICTED RIGHTS“: Nutzung, Vervielfältigung oder Offenlegung durch die US-Regierung unterliegt den Einschränkungen gemäß Unterabschnitt (b)(3) der Klausel „Rights in Technical Data – Noncommercial Items“ in DFARS 252.227-7013 (Februar 2014) und FAR 52.227-19 (Dezember 2007).

Die hierin enthaltenen Daten beziehen sich auf ein kommerzielles Produkt und/oder einen kommerziellen Service (wie in FAR 2.101 definiert) und sind Eigentum von NetApp, Inc. Alle technischen Daten und die Computersoftware von NetApp, die unter diesem Vertrag bereitgestellt werden, sind gewerblicher Natur und wurden ausschließlich unter Verwendung privater Mittel entwickelt. Die US-Regierung besitzt eine nicht ausschließliche, nicht übertragbare, nicht unterlizenzierbare, weltweite, limitierte unwiderrufliche Lizenz zur Nutzung der Daten nur in Verbindung mit und zur Unterstützung des Vertrags der US-Regierung, unter dem die Daten bereitgestellt wurden. Sofern in den vorliegenden Bedingungen nicht anders angegeben, dürfen die Daten ohne vorherige schriftliche Genehmigung von NetApp, Inc. nicht verwendet, offengelegt, vervielfältigt, geändert, aufgeführt oder angezeigt werden. Die Lizenzrechte der US-Regierung für das US-Verteidigungsministerium sind auf die in DFARS-Klausel 252.227-7015(b) (Februar 2014) genannten Rechte beschränkt.

## Markeninformationen

NETAPP, das NETAPP Logo und die unter <http://www.netapp.com/TM> aufgeführten Marken sind Marken von NetApp, Inc. Andere Firmen und Produktnamen können Marken der jeweiligen Eigentümer sein.