



Setting

Astra Automation

NetApp
February 12, 2024

Table of Contents

- Setting 1
 - Setting overview 1
 - List all settings 1
 - Retrieve a setting 13
 - Modify a setting 23

Setting

Setting overview

An account setting is a collection of key/value pairs that are important for a known feature in an Astra account. The following table provides important information about an account setting.

List all settings

GET `/accounts/{account_id}/core/v1/settings`

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">example: {{.Account}}
include	string	query	False	Indicates which fields should be returned when listing a collection. URL examples: "include=id", "include=id,name" OpenAPI examples: "id"
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. URL examples: "limit=2" OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> • eq - Equality • lt/gt - Less than/Greater than • lte/gte - Less than or equals to/Greater than or equals to <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples: "count=true"</p> <p>OpenAPI examples: "true"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>

Name	Type	In	Required	Description
skip	string	query	False	Indicates the number of resources to skip over when listing a collection. URL examples: "skip=1" OpenAPI examples: "1"

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: setting_1.0_get_response_body , array[]]	True	
metadata	type_astra_metadata_list	True	

Example response

```
{
  "type": "application/astra-settings",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-setting",
      "version": "1.0",
      "id": "5da0a2ed-c51d-4d91-8b98-ed3aa8a88cc5",
      "name": "astra.account.smtp",
      "currentConfig": {
        "credential": "",
        "isEnabled": "false",
        "port": 587,
        "relayServer": "smtp.sendgrid.net"
      },
      "configSchema": {
        "$schema": "http://json-schema.org/draft-07/schema#",
        "title": "astra.account.smtp",
        "type": "object",
        "properties": {
          "credential": {
            "type": "string",
            "description": "The credential ID for SMTP authentication."
          },
          "isEnabled": {
            "type": "string",
            "description": "This property determines if this setting is
enabled or not."
          },
          "port": {
            "type": "integer",
            "description": "The SMTP port. For an unencrypted or a TLS
connection, use port 25, 2525, or 587."
          },
          "relayServer": {
            "type": "string",
            "description": "This setting is sometimes referred to as
the external SMTP server or the SMTP relay."
          }
        },
        "additionalProperties": false,
        "required": [
          "relayServer",
          "port",
```

```

        "isEnabled"
      ]
    },
    "state": "valid",
    "stateUnready": [],
    "metadata": {
      "labels": [],
      "creationTimestamp": "2021-06-04T20:14:52Z",
      "modificationTimestamp": "2021-06-04T20:14:52Z",
      "createdBy": "c9550bbb-e70b-4578-8504-07397f875bcb",
      "modifiedBy": "65e1571b-1b46-4f05-95b0-7d7f5a93da6a"
    }
  }
],
"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	False	
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	False	
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	False	
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	False	
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_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

type_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

properties

type_json_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	properties	True	
additionalProperties	boolean	True	
required	array[string]	True	

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 update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	

Name	Type	Required	Description
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

setting_1.0_get_response_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> "application/astra-setting"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> "1.0"
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the UUIDv4 Schema
name	string	True	JSON string containing a name for the setting, in hierarchal dot notation (.). Defined values are: <ul style="list-style-type: none"> Minimum length: 1 Maximum length: 63 This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.

Name	Type	Required	Description
currentConfig	type_json	True	JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.
desiredConfig	type_json	False	JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

Name	Type	Required	Description
configSchema	type_json_schema	True	<p>JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").</p>
state	string	True	<p>JSON string containing a value indicating the operational state of the application. Defined values are:</p> <ul style="list-style-type: none"> • "valid" - The current configuration matches the desired config. • "pending" - The desired configuration is being applied. • "error" - The desired configuration cannot be applied.
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied. Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127

Name	Type	Required	Description
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

type_astra_metadata_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
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

Retrieve a setting

GET /accounts/{account_id}/core/v1/settings/{setting_id}

Returns the stored Setting 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">example: <code>{{.Account}}</code>
setting_id	string	path	True	ID of the setting collection to list

Response

Status: 200, Returns the stored Setting 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">"application/astra-setting"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none">"1.0"
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none">Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the setting, in hierarchal dot notation (.). Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.
currentConfig	type_json	True	<p>JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.</p>

Name	Type	Required	Description
desiredConfig	type_json	False	JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.
configSchema	type_json_schema	True	JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application. Defined values are:</p> <ul style="list-style-type: none"> • "valid" - The current configuration matches the desired config. • "pending" - The desired configuration is being applied. • "error" - The desired configuration cannot be applied.
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied. Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127
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"> • Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example response

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "id": "7d490413-446b-5f86-8818-744e1c10a6c6",
  "name": "astra.account.smtp",
  "currentConfig": {
    "credential": "",
    "isEnabled": "false",
    "port": 587,
    "relayServer": "smtp.sendgrid.net"
  },
  "configSchema": {
    "$schema": "http://json-schema.org/draft-07/schema#",
    "title": "astra.account.smtp",
    "type": "object",
    "properties": {
      "credential": {
        "type": "string",
        "description": "The credential ID for SMTP authentication."
      },
      "isEnabled": {
        "type": "string",
        "description": "This property determines if this setting is
enabled or not."
      },
      "port": {
        "type": "integer",
        "description": "The SMTP port. For an unencrypted or a TLS
connection, use port 25, 2525, or 587."
      },
      "relayServer": {
        "type": "string",
        "description": "This setting is sometimes referred to as the
external SMTP server or the SMTP relay."
      }
    },
    "additionalProperties": false,
    "required": [
      "relayServer",
      "port",
      "isEnabled"
    ]
  },
  "state": "valid",
}
```

```
"stateUnready": [],
"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	False	
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	False	

Name	Type	Required	Description
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	False	
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	False	
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_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

type_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

properties

type_json_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	properties	True	
additionalProperties	boolean	True	
required	array[string]	True	

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 update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	

Name	Type	Required	Description
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 setting

PUT /accounts/{account_id}/core/v1/settings/{setting_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"> example: <code>{{.Account}}</code>
setting_id	string	path	True	ID of the setting 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"> • "application/astra-setting"
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> • "1.0"
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema
name	string	False	JSON string containing a name for the setting, in hierarchal dot notation (.). Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 63 • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.

Name	Type	Required	Description
currentConfig	type_json	False	JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.
desiredConfig	type_json	False	JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

Name	Type	Required	Description
configSchema	type_json_schema	False	JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").
state	string	False	<p>JSON string containing a value indicating the operational state of the application. Defined values are:</p> <ul style="list-style-type: none"> • "valid" - The current configuration matches the desired config. • "pending" - The desired configuration is being applied. • "error" - The desired configuration cannot be applied.
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied. Defined values are:</p> <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 127

Name	Type	Required	Description
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example request

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "desiredConfig": {
    "credential": "e3d2ea77-398e-49be-85fd-ec66d9426a06",
    "port": 587,
    "relayServer": "<a href="
http://smtp.sendgrid.net>smtp.sendgrid.net</a>",
    "isEnabled": "true"
  }
}
```

Response

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

Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
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	False	
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	False	
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	False	
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	False	
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_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

type_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

properties

type_json_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	properties	True	
additionalProperties	boolean	True	
required	array[string]	True	

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 update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	

Name	Type	Required	Description
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

Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.