



# Manage cluster firmware history

## ONTAP 9.15.1 REST API reference

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# Manage cluster firmware history

## Cluster firmware history endpoint overview

### Overview

Use this API to retrieve a history of firmware update requests. This API supports GET calls.

### Examples

#### Retrieving history of firmware updates

The following example retrieves a history of firmware updates performed on the cluster. Note that if the *fields=\** parameter is not specified, only the job ID and start time are returned. Filters can be added on the fields to limit the results.

```
# The API:
GET /api/cluster/firmware/history

# The call:
curl -X GET "https://<mgmt-ip>/api/cluster/firmware/history/?fields=*" -H
"accept: application/hal+json"

# The response:
200 OK
{
  "records": [
    {
      "start_time": "1970-01-01T00:02:03+00:00",
      "job": {
        "uuid": "adf700c2-b50e-11ea-a54f-005056bbec43"
      },
      "node": {
        "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ee",
        "name": "node1"
      },
      "fw_file_name": "all_disk_fw.zip",
      "fw_update_state": "starting_workers",
      "end_time": "1970-01-01T00:07:36+00:00",
      "update_status": [
        {
          "worker": {
            "node": {
              "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ee",
              "name": "node1"
            }
          }
        }
      ]
    }
  ]
}
```

```

    },
    "state": "failed",
    "error": {
      "message": "A firmware file already exists.",
      "code": 2228327
    }
  }
},
{
  "worker": {
    "node": {
      "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ef",
      "name": "node2"
    },
    "state": "complete",
    "error": {
      "message": "Success",
      "code": 0
    }
  }
}
],
"_links": {
  "self": {
    "href": "/api/cluster/firmware/history/1970-01-01T00%3A02%3A03-00%3A00/adf700c2-b50e-11ea-a54f-005056bbec43"
  }
}
},
{
  "start_time": "1970-01-01T00:02:03+00:00",
  "job": {
    "uuid": "f84adabe-b50e-11ea-a54f-005056bbec43"
  },
  "node": {
    "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ee",
    "name": "node1"
  },
  "fw_file_name": "all_shelf_fw.zip",
  "fw_update_state": "completed",
  "end_time": "1970-01-01T00:07:36+00:00",
  "update_status": [
    {
      "worker": {
        "node": {
          "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ee",

```

```

    "name": "node1"
  },
  "state": "failed",
  "error": {
    "message": "A firmware file already exists.",
    "code": 2228327
  }
},
{
  "worker": {
    "node": {
      "uuid": "0530d6c1-8c6d-11e8-907f-00a0985a72ef",
      "name": "node2"
    },
    "state": "complete",
    "error": {
      "message": "Success",
      "code": 0
    }
  }
},
{
  "_links": {
    "self": {
      "href": "/api/cluster/firmware/history/1970-01-01T00%3A02%3A03-00%3A00/f84adabe-b50e-11ea-a54f-005056bbec43"
    }
  }
},
{
  "num_records": 2,
  "_links": {
    "self": {
      "href": "/api/cluster/firmware/history/?fields=%2A"
    }
  }
}
}

```

## Retrieve history details for firmware update requests

GET /cluster/firmware/history

Introduced In: 9.8

Retrieves the history details for firmware update requests.

## Learn more

- [DOC /cluster/firmware/history](#)

## Parameters

Name	Type	In	Required	Description
job.uuid	string	query	False	Filter by job.uuid
end_time	string	query	False	Filter by end_time
update_status.worker.state	string	query	False	Filter by update_status.worker.state
update_status.worker.error.message	string	query	False	Filter by update_status.worker.error.message
update_status.worker.error.code	integer	query	False	Filter by update_status.worker.error.code
update_status.worker.node.uuid	string	query	False	Filter by update_status.worker.node.uuid
update_status.worker.node.name	string	query	False	Filter by update_status.worker.node.name
start_time	string	query	False	Filter by start_time
fw_update_state	string	query	False	Filter by fw_update_state
fw_file_name	string	query	False	Filter by fw_file_name
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name
fields	array[string]	query	False	Specify the fields to return.

Name	Type	In	Required	Description
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">firmware_history</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "end_time": "2019-02-02 14:00:00 -0500",
      "fw_file_name": "all_disk_fw.zip",
      "fw_update_state": "string",
      "job": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "uuid": "string"
      },
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "start_time": "2019-02-02 14:00:00 -0500",
      "update_status": [
        {
          "worker": {
            "error": {
              "code": 2228325,
              "message": "Cannot open local staging ZIP file"
            }
          }
        }
      ]
    }
  ]
}
```



```

disk_firmware.zip"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "state": "waiting_to_retry"
  }
]
}
]
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

## Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

# Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

job\_link

Name	Type	Description
_links	<a href="#">_links</a>	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

node

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
uuid	string	

firmware\_history\_update\_state\_error

Name	Type	Description
code	integer	Code corresponding to the status message.
message	string	Error message returned when a firmware update job fails.

worker

Name	Type	Description
error	<a href="#">firmware_history_update_state_error</a>	
node	<a href="#">node</a>	
state	string	The state of each worker that a node is controlling.

#### firmware\_history\_update\_state

Name	Type	Description
worker	<a href="#">worker</a>	

#### firmware\_history

Name	Type	Description
_links	<a href="#">_links</a>	
end_time	string	End time of this update request.
fw_file_name	string	Name of the firmware file.
fw_update_state	string	
job	<a href="#">job_link</a>	
node	<a href="#">node</a>	
start_time	string	Start time of this update request.
update_status	array[ <a href="#">firmware_history_update_state</a> ]	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code

<b>Name</b>	<b>Type</b>	<b>Description</b>
message	string	Error message
target	string	The target parameter that caused the error.

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