

Data Module Manager v2.1

Copyright © Riverbed Technology Inc. 2024

Created Jun 23, 2026 at 05:06 AM

Resource: data_area

Data Area specification for a data module

http://{device}/api/npm.data_manager/2.1/data_areas/items/{data_module_name}/{data_section_id}

JSON

```
{
  "available": boolean,
  "data_module_name": string,
  "data_section_id": string,
  "elastic": boolean,
  "enabled": boolean,
  "hidden": boolean,
  "index": integer,
  "locked": boolean,
  "parent_data_module": string,
  "path": string,
  "quota_size_mb": integer,
  "status": string,
  "status_reason": string,
  "system": boolean,
  "used_space_mb": integer
}
```

Property Name	Type	Description	Notes
data_area	<object>	Data Area specification for a data module	Required properties: [data_module_name, data_section_id, quota_size_mb];
data_area.available	<boolean>	True if the data area is available for use	Optional;
data_area.data_module_name	<string>	The name of the data module owning this data area	Read-only;
data_area.data_section_id	<string>	The ID of the data section this data area belongs to	Read-only;
data_area.elastic	<boolean>	If true, this data area will automatically resize to accomodate changes in data areas on the same volume Only one data area belonging to each data section may have this flag set to true	Read-only; Optional;
data_area.enabled	<boolean>	Enabled status of the data area	Read-only; Optional; Default is True;
data_area.hidden	<boolean>	Hidden from user views	Read-only; Optional;
data_area.index	<integer>	The index of the data area within its data section or parent data area	Read-only; Optional;
data_area.locked	<boolean>	True if the lock is held by either the client or the system	Optional;
data_area.parent_data_module	<string>	If not the empty string, this data area is considered part of the named data area on the same data section	Read-only; Optional;
data_area.path	<string>	The path on disk where data is stored	Read-only; Optional;
data_area.quota_size_mb	<integer>	Size (in MB) of allocated space	Read-only; Minimum 0;
status	<string>	Status of a data area 'active' indicates a working and available area, 'disabled' indicates that the data area is disabled 'failed' indicates a failure due to the data section's availability might not be fixable without data loss 'unconfigured' indicates a repairable failure 'moving' indicates that the data area is currently being relocated	Read-only; Values: active, moving, resizing, failed, disabled;
data_area.status_reason	<string>	Reason for the current status, if available	Read-only; Optional;
data_area.system	<boolean>	Is the catch-all system data area	Read-only; Optional;
data_area.used_space_mb	<integer>	Size (in MB) of stored data	Read-only; Optional; Minimum 0;

Links

data_area: get

GET http://{device}/api/npm.data_manager/2.1/data_areas/items/{data_module_name}/{data_section_id}

Response Body

Returns a [data_area](#) data object.

Relations

data_area: data_module

Related resource

[data_module](#)

Variables

Related var	Data value for replacement
name	0/data_module_name

data_area: data_section

Related resource

[data_section](#)

Variables

Related var	Data value for replacement
id	0/data_section_id

data_area: instances

Related resource

[data_areas](#)

data_area: parent

Related resource

[data_area](#)

Variables

Related var	Data value for replacement
data_module_name	0/parent_name
data_section_id	0/data_section_id

Resource: data_area_event

Signals a change to a data area's presence or status

http://{device}/api/npm.data_manager/2.1/event_queues/data_area_events/{id}

JSON

```
{
  "data_module": string,
  "data_section_id": string,
  "hdr": event_header,
  "quota_size_mb": integer,
  "status": string,
  "status_reason": string,
  "used_mb": integer
}
```

Property Name	Type	Description	Notes
<i>data_area_event</i>	<i><object></i>	Signals a change to a data area's presence or status	Required properties: [data_module, quota_size_mb, data_section_id, status];
<i>data_area_event.data_module</i>	<i><string></i>	Name of the affected data module	
<i>data_area_event.data_section_id</i>	<i><string></i>	Data section id	
<i>data_area_event.hdr</i>	<i><event_header></i>	Common properties for all events	
<i>data_area_event.quota_size_mb</i>	<i><integer></i>	Quota size	
<i>data_area_event.status</i>	<i><string></i>	Data area status	
<i>data_area_event.status_reason</i>	<i><string></i>	Data area status reason	Optional;
<i>data_area_event.used_mb</i>	<i><integer></i>	Amount of data (in MB) currently used	Optional;

Links

data_area_event: get

GET http://{device}/api/npm.data_manager/2.1/event_queues/data_area_events/{id}

Response Body

Returns a [data_area_event](#) data object.

Relations

data_area_event: instances

Related resource

[data_area_events](#)

Resource: data_area_events

Collection of data area events stored

http://{device}/api/npm.data_manager/2.1/event_queues/data_area_events{?limit,since_id}

JSON

```
{
  "items": [ data\_area\_event ]
}
```

Property Name	Type	Description	Notes
<i>data_area_events</i>	<i><object></i>	Collection of data area events stored	
<i>data_area_events.items</i>	<i><array of <data_area_event>></i>		Optional;
<i>data_area_events.items[items]</i>	<i><data_area_event></i>	Signals a change to a data area's presence or status	

Links

data_area_events: create

POST http://{device}/api/npm.data_manager/2.1/event_queues/data_area_events{?limit,since_id}

Request Body

Provide a [data_area_event](#) data object.

Response Body

Returns a [data_area_event](#) data object.

data_area_events: get

GET http://{device}/api/npm.data_manager/2.1/event_queues/data_area_events{?limit,since_id}

Response Body

Returns a [data_area_events](#) data object.

Resource: data_areas

Collection of data areas

http://{device}/api/npm.data_manager/2.1/data_areas{?data_module_name,data_section_id,status,parent_data_module}

JSON

```
{
  "items": [ data\_area ]
}
```

Property Name	Type	Description	Notes
<i>data_areas</i>	<i><object></i>	Collection of data areas	
<i>data_areas.items</i>	<i><array of <data_area>></i>		Optional;
<i>data_areas.items[items]</i>	<i><data_area></i>	Data Area specification for a data module	

Links

data_areas: create

```
POST http://{device}/api/npm.data_manager/2.1/data_areas{?data_module_name,data_section_id,status,parent_data_module}
```

Request Body

Provide a [data_area](#) data object.

Response Body

Returns a [data_area](#) data object.

data_areas: get

```
GET http://{device}/api/npm.data_manager/2.1/data_areas{?data_module_name,data_section_id,status,parent_data_module}
```

Response Body

Returns a [data_areas](#) data object.

Relations

data_areas: data_module

Related resource

[data_area](#)

Variables

Related var	Data value for replacement
name	0/data_module

Resource: data_module

A description of the storage requirements of a component that stores data on the system

```
http://{device}/api/npm.data_manager/2.1/data_modules/items/{name}
```

JSON

```
{
  "data_areas_max": integer,
  "data_areas_min": integer,
  "expands": boolean,
  "granularity_mb": integer,
  "hidden": boolean,
  "index": integer,
  "name": string,
  "parent_data_module": string,
  "quota_max_mb": integer,
  "quota_min_mb": integer,
  "relocatable_data": boolean,
  "required_role": string,
  "resizable": boolean
}
```

Property Name	Type	Description	Notes
<i>data_module</i>	<i><object></i>	A description of the storage requirements of a component that stores data on the system	
<i>data_module.data_areas_max</i>	<i><integer></i>	Maximum number of data areas supported by module	Read-only; Optional;
<i>data_module.data_areas_min</i>	<i><integer></i>	Minimum number of data areas supported by module	Read-only; Optional;
<i>data_module.expands</i>	<i><boolean></i>	Whether data areas for this data module expand to fill empty space automatically	Read-only; Optional;
<i>data_module.granularity_mb</i>	<i><integer></i>	Allowed granularity of quota value	Read-only; Optional;
<i>data_module.hidden</i>	<i><boolean></i>	True if this should be excluded from user views.	Read-only; Optional;
<i>data_module.index</i>	<i><integer></i>	Display order index	Read-only; Optional;
<i>data_module.name</i>	<i><string></i>	Name of the component	Read-only; Optional;
<i>data_module.parent_data_module</i>	<i><string></i>	Name of the parent data module, or the empty string	Read-only; Optional;
<i>data_module.quota_max_mb</i>	<i><integer></i>	Minimum space that can be allocated to the data module	Read-only; Optional;
<i>data_module.quota_min_mb</i>	<i><integer></i>	Maximum size allocatable to this data module	Read-only; Optional;
<i>data_module.relocatable_data</i>	<i><boolean></i>	Whether data for this module can be relocated without data loss	Read-only; Optional;
<i>data_module.required_role</i>	<i><string></i>	The role a data section must have to host a data area for this module	Read-only; Optional;
<i>data_module.resizable</i>	<i><boolean></i>	True if data module's data areas can be resized	Read-only; Optional;

Links

data_module: get

```
GET http://{device}/api/npm.data_manager/2.1/data_modules/items/{name}
```

Response Body

Returns a [data_module](#) data object.

Relations

data_module: data_areas

Related resource

[data_areas](#)

Variables

Related var	Data value for replacement
data_module_name	0/name

data_module: instances

Related resource

[data_modules](#)

Resource: data_modules

The collection of all defined data modules, describing the storage requirements of components that store data on the system

http://{device}/api/npm.data_manager/2.1/data_modules

JSON

```
{
  "items": [ data\_module ]
}
```

Property Name	Type	Description	Notes
<i>data_modules</i>	<i><object></i>	The collection of all defined data modules, describing the storage requirements of components that store data on the system	
<i>data_modules.items</i>	<i><array of <data_module>></i>		Optional;
<i>data_modules.items[items]</i>	<i><data_module></i>	A description of the storage requirements of a component that stores data on the system	

Links

data_modules: get

GET http://{device}/api/npm.data_manager/2.1/data_modules

Response Body

Returns a [data_modules](#) data object.

Resource: data_section

A description of a data section, where data areas may be assigned a quota to store data produced by data modules

http://{device}/api/npm.data_manager/2.1/data_sections/items/{id}

JSON

```
{
  "default_mode": string,
  "device": string,
  "encrypted": boolean,
  "id": data\_section\_id,
  "label": string,
  "mode": string,
  "mountpoint": string,
  "primary": [
    string
  ],
  "reinitializable": boolean,
  "roles": [
    string
  ],
  "size_mb": integer,
  "status": data\_section\_status,
  "status_reason": string,
  "storage_unit": string,
  "supported_modes": [
    {
      "name": string,
      "volume_size_mb": integer
    }
  ],
  "supports_encryption": boolean,
  "total_space_mb": integer
}
```

Property Name	Type	Description	Notes
---------------	------	-------------	-------

<i>data_section</i>	<i><object></i>	A description of a data section, where data areas may be assigned a quota to store data produced by data modules	
<i>data_section.default_mode</i>	<i><string></i>	Default RAID mode for the volume.	Read-only; Optional;
<i>data_section.device</i>	<i><string></i>	Internal device name	Optional;
<i>data_section.encrypted</i>	<i><boolean></i>	True if data section is encrypted.	Read-only; Optional;
<i>data_section.id</i>	<i><data_section_id></i>	A data section identifier	
<i>data_section.label</i>	<i><string></i>	Human readable name	Optional;
<i>data_section.mode</i>	<i><string></i>	Name of currently configured storage mode	Optional;
<i>data_section.mountpoint</i>	<i><string></i>	Internal mountpoint	Optional;
<i>data_section.primary</i>	<i><array of <string>></i>	A list of roles for which this data section should be used first	Optional;
<i>data_section.primary[items]</i>	<i><string></i>		
<i>data_section.reinitializable</i>	<i><boolean></i>	Whether this data section can be reinitialized	Read-only; Optional;
<i>data_section.roles</i>	<i><array of <string>></i>	A list of data roles supported by this data section	Optional;
<i>data_section.roles[items]</i>	<i><string></i>		
<i>data_section.size_mb</i>	<i><integer></i>	Total usable space on the data section, in MiB	Optional;
<i>data_section.status</i>	<i><data_section_status></i>	The possible statuses of a data section	Values: active, missing, failed, invalid, initializing, uninitialized, unconfigured, unmounted, foreign;
<i>data_section.status_reason</i>	<i><string></i>	Reason for the current status, if available	Optional;
<i>data_section.storage_unit</i>	<i><string></i>	If implemented by a storage unit, the serial number of that SU	Optional;
<i>data_section.supported_modes</i>	<i><array of <object>></i>	A listing of supported data section mode names and their associated volume sizes	Optional;
<i>data_section.supported_modes[items]</i>	<i><object></i>		
<i>data_section.supported_modes[items].name</i>	<i><string></i>		Optional;
<i>data_section.supported_modes[items].volume_size_mb</i>	<i><integer></i>		Optional;
<i>data_section.supports_encryption</i>	<i><boolean></i>	True if data section supports encryption features.	Read-only; Optional;
<i>data_section.total_space_mb</i>	<i><integer></i>	Total expected usable space on the data section, in MiB.	Optional;

Links

data_section: get

```
GET http://{device}/api/npm.data_manager/2.1/data_sections/items/{id}
```

Response Body

Returns a [data_section](#) data object.

data_section: import

Mark a foreign data section for use on this system Foreign data sections cannot be used until they have been imported

```
POST http://{device}/api/npm.data_manager/2.1/data_sections/items/{id}/import
```

Request Body

Do not provide a request body.

Response Body

On success, the server does not provide any body in the responses.

Relations

data_section: data_areas

Related resource

[data_areas](#)

Variables

Related var	Data value for replacement
data_section_id	0/id

data_section: disabled_data_areas

Related resource

[disabled_data_areas](#)

Variables

Related var	Data value for replacement
data_section_id	0/id

data_section: instances

Related resource

[data_sections](#)

Resource: data_section_event

Signals a change in a data section's presence or status

http://{device}/api/npm.data_manager/2.1/event_queues/data_section_events/{id}

JSON

```
{
  "data_section_id": string,
  "hdr": event_header,
  "status": string,
  "status_reason": string
}
```

Property Name	Type	Description	Notes
data_section_event	<object>	Signals a change in a data section's presence or status	Required properties: [data_section_id, status];
data_section_event.data_section_id	<string>	Data section id	
data_section_event.hdr	<event_header>	Common properties for all events	
data_section_event.status	<string>	Data section status	
data_section_event.status_reason	<string>	Data section status reason	Optional;

Links

data_section_event: get

GET http://{device}/api/npm.data_manager/2.1/event_queues/data_section_events/{id}

Response Body

Returns a [data_section_event](#) data object.

Relations

data_section_event: instances

Related resource

[data_section_events](#)

Resource: data_section_events

Collection of all data section events

http://{device}/api/npm.data_manager/2.1/event_queues/data_section_events{?limit,since_id}

JSON

```
{
  "items": [ data_section_event ]
}
```

Property Name	Type	Description	Notes
data_section_events	<object>	Collection of all data section events	
data_section_events.items	<array of <data_section_event>>		Optional;
data_section_events.items[items]	<data_section_event>	Signals a change in a data section's presence or status	

Links

data_section_events: create

POST http://{device}/api/npm.data_manager/2.1/event_queues/data_section_events{?limit,since_id}

Request Body

Provide a [data_section_event](#) data object.

Response Body

Returns a [data_section_event](#) data object.

data_section_events: get

GET http://{device}/api/npm.data_manager/2.1/event_queues/data_section_events{?limit,since_id}

Response Body

Returns a [data_section_events](#) data object.

Resource: data_sections

A collection of all data section information

http://{device}/api/npm.data_manager/2.1/data_sections{?id,roles,primary}

JSON

```
{
  "items": [ data_section ]
}
```

Property Name	Type	Description	Notes
data_sections	<object>	A collection of all data section information	
data_sections.items	<array of <data_section>>		Optional;
data_sections.items[items]	<data_section>	A description of a data section, where data areas may be assigned a quota to store data produced by data modules	

Links

data_sections: get

```
GET http://{device}/api/npm.data_manager/2.1/data_sections{?id,roles,primary}
```

Response Body

Returns a [data_sections](#) data object.

data_sections: rescan

Refresh the internal list of data sections

```
POST http://{device}/api/npm.data_manager/2.1/data_sections/rescan
```

Request Body

Do not provide a request body.

Response Body

On success, the server does not provide any body in the responses.

Resource: disabled_data_areas

Collection of disabled data areas, which are normally filtered out of the data_areas collection

```
http://{device}/api/npm.data_manager/2.1/disabled_data_areas{?data_module_name,data_section_id,status}
```

JSON

```
{
  "items": [ data\_area ]
}
```

Property Name	Type	Description	Notes
<i>disabled_data_areas</i>	<i><object></i>	Collection of disabled data areas, which are normally filtered out of the data_areas collection	
<i>disabled_data_areas.items</i>	<i><array of <data_area>></i>		Optional;
<i>disabled_data_areas.items[items]</i>	<i><data_area></i>	Data Area specification for a data module	

Links

disabled_data_areas: get

```
GET http://{device}/api/npm.data_manager/2.1/disabled_data_areas{?data_module_name,data_section_id,status}
```

Response Body

Returns a [disabled_data_areas](#) data object.

Relations

disabled_data_areas: data_module

Related resource

[data_area](#)

Variables

Related var	Data value for replacement
name	0/data_module

Resource: encryption_key

```
http://{device}/api/npm.data_manager/2.1/encryption_key
```

JSON

```
{
  "encryption_key_set": boolean,
  "new_encryption_key": string,
  "old_encryption_key": string,
  <prop>: any
}
```

Property Name	Type	Description	Notes
<i>encryption_key</i>	<i><object></i>		Required properties: [encryption_key_set];
<i>encryption_key</i> .encryption_key_set	<i><boolean></i>		Read-only;
<i>encryption_key</i> .new_encryption_key	<i><string></i>		Optional;
<i>encryption_key</i> .old_encryption_key	<i><string></i>		Optional;
<i>encryption_key</i> .<prop>	<i><any></i>		Optional;

Links

encryption_key: generate

POST http://{device}/api/npm.data_manager/2.1/encryption_key/generate

Request Body

Provide a request body with the following structure:

JSON

```
{
  "length": integer,
  <prop>: any
}
```

Property Name	Type	Description	Notes
<i>encryption_key</i> .links.generate.request	<i><object></i>		
<i>encryption_key</i> .links.generate.request.length	<i><integer></i>		Optional; Range: 8 to 32; Default is 16;
<i>encryption_key</i> .links.generate.request.<prop>	<i><any></i>		Optional;

Response Body

On success, the server returns a response body with the following structure:

JSON

```
{
  "encryption_key": string,
  <prop>: any
}
```

Property Name	Type	Description	Notes
<i>encryption_key</i> .links.generate.response	<i><object></i>		Required properties: [encryption_key];
<i>encryption_key</i> .links.generate.response.encryption_key	<i><string></i>	Randomly generated encryption key	
<i>encryption_key</i> .links.generate.response.<prop>	<i><any></i>		Optional;

encryption_key: get

GET http://{device}/api/npm.data_manager/2.1/encryption_key

Response Body

Returns an [encryption_key](#) data object.

encryption_key: set

```
PUT http://{device}/api/npm.data_manager/2.1/encryption_key
```

Request Body

Provide an `encryption_key` data object.

Response Body

Returns an `encryption_key` data object.

encryption_key: unset

```
POST http://{device}/api/npm.data_manager/2.1/encryption_key/unset
```

Request Body

Do not provide a request body.

Response Body

Returns an `encryption_key` data object.

Resource: layout

A layout definition, describing how data areas are assigned

```
http://{device}/api/npm.data_manager/2.1/layouts/items/{name}
```

JSON

```
{
  "available": boolean,
  "configurable": boolean,
  "description": string,
  "label": string,
  "name": string,
  "requires_data_section": boolean,
  "valid_data_sections": [
    string
  ]
}
```

Property Name	Type	Description	Notes
<i>layout</i>	<i><object></i>	A layout definition, describing how data areas are assigned	
<i>layout.available</i>	<i><boolean></i>	True if the mode can be selected from the current state, otherwise it is not possible to transition to this layout from the current one	Optional;
<i>layout.configurable</i>	<i><boolean></i>	True if the layout can be configured	Read-only; Optional;
<i>layout.description</i>	<i><string></i>	An explanation of the data area layout	Optional;
<i>layout.label</i>	<i><string></i>	Human-readable layout name	Optional;
<i>layout.name</i>	<i><string></i>	Layout identifier	Optional;
<i>layout.requires_data_section</i>	<i><boolean></i>	If true, a data section must be specified as a default target for the layout	Optional; Default is False;
<i>layout.valid_data_sections</i>	<i><array of <string>></i>	A list of data sections valid for the layout in the current configuration	Optional;
<i>layout.valid_data_sections[items]</i>	<i><string></i>		

Links

layout: get

```
GET http://{device}/api/npm.data_manager/2.1/layouts/items/{name}
```

Response Body

Returns a `layout` data object.

Relations

layout: instances

Related resource

[layouts](#)

Resource: layout_event

Signals a change in the storage layout

http://{device}/api/npm.data_manager/2.1/event_queues/layout_events/{id}

JSON

```
{
  "hdr": event\_header,
  "name": string,
  "status": string
}
```

Property Name	Type	Description	Notes
<i>layout_event</i>	<object>	Signals a change in the storage layout	Required properties: [name, status];
<i>layout_event.hdr</i>	<event_header>	Common properties for all events	
<i>layout_event.name</i>	<string>	Current or target layout name	
<i>layout_event.status</i>	<string>	Layout manager status	

Links

layout_event: get

GET http://{device}/api/npm.data_manager/2.1/event_queues/layout_events/{id}

Response Body

Returns a [layout_event](#) data object.

Relations

layout_event: instances

Related resource

[layout_events](#)

Resource: layout_events

Collection of all data section events

http://{device}/api/npm.data_manager/2.1/event_queues/layout_events{?limit,since_id}

JSON

```
{
  "items": [ layout\_event ]
}
```

Property Name	Type	Description	Notes
<i>layout_events</i>	<object>	Collection of all data section events	
<i>layout_events.items</i>	<array of layout_event>		Optional;
<i>layout_events.items[items]</i>	<layout_event>	Signals a change in the storage layout	

Links

layout_events: create

```
POST http://{device}/api/npm.data_manager/2.1/event_queues/layout_events{?limit,since_id}
```

Request Body

Provide a [layout_event](#) data object.

Response Body

Returns a [layout_event](#) data object.

layout_events: get

```
GET http://{device}/api/npm.data_manager/2.1/event_queues/layout_events{?limit,since_id}
```

Response Body

Returns a [layout_events](#) data object.

Resource: layout_status

The layout of data areas to enable. Changing this option begins a reconfiguration procedure that will require rebooting

```
http://{device}/api/npm.data_manager/2.1/layout
```

JSON

```
{
  "configurable": boolean,
  "configuration": layout_configuration,
  "customized": boolean,
  "data_section": string,
  "name": string,
  "progress": integer,
  "status": string
}
```

Property Name	Type	Description	Notes
<i>layout_status</i>	<i><object></i>	The layout of data areas to enable. Changing this option begins a reconfiguration procedure that will require rebooting	Required properties: [name];
<i>layout_status.configurable</i>	<i><boolean></i>	If true, the configuration may be changed	Read-only; Optional;
<i>layout_status.configuration</i>	<i><layout_configuration></i>	Customizable parameters for the selected layout	
<i>layout_status.customized</i>	<i><boolean></i>	If true, the named layout has been customized and no longer matches defaults.	Read-only; Optional;
<i>layout_status.data_section</i>	<i><string></i>	Data section targeted by this layout, empty if none required	Optional; Default is ;
<i>layout_status.name</i>	<i><string></i>		
<i>layout_status.progress</i>	<i><integer></i>	Percentage of operation progress as an integer	Read-only; Optional;
<i>layout_status.status</i>	<i><string></i>	The current status of the layout configuration	Read-only; Optional; Values: idle, pending, reconfiguring, failed, reboot_required;

Links

layout_status: compare

Compare the proposed layout configuration to the current configuration, returning a description of the changes that would be made

```
POST http://{device}/api/npm.data_manager/2.1/layout/compare
```

Request Body

Provide a [layout_status](#) data object.

Response Body
Returns a [layout_diff](#) data object.

layout_status: get

GET http://{device}/api/npm.data_manager/2.1/layout

Response Body
Returns a [layout_status](#) data object.

layout_status: set

PUT http://{device}/api/npm.data_manager/2.1/layout

Request Body
Provide a [layout_status](#) data object.

Response Body
Returns a [layout_status](#) data object.

layout_status: validate
Checks whether the proposed layout status change is possible given the current layout configuration

POST http://{device}/api/npm.data_manager/2.1/layout/validate

Request Body
Provide a [layout_status](#) data object.

Response Body
Returns a [layout_configuration_result](#) data object.

Relations

layout_status: layout

Related resource
[layout](#)

Variables

Related var	Data value for replacement
name	0/name

Resource: layouts

The collection of all supported storage layouts

http://{device}/api/npm.data_manager/2.1/layouts

JSON

```
{
  "items": [ layout ]
}
```

Property Name	Type	Description	Notes
layouts	<object>	The collection of all supported storage layouts	
layouts.items	<array of <layout>>		Optional;
layouts.items[items]	<layout>	A layout definition, describing how data areas are assigned	

Links

layouts: get

```
GET http://{device}/api/npm.data_manager/2.1/layouts
```

Response Body

Returns a [layouts](#) data object.

Type: data_area_key

The pair of Data Module name and Data Section ID that uniquely identifies a data area

JSON

```
{
  "data_module": string,
  "data_section": string
}
```

Property Name	Type	Description	Notes
<i>data_area_key</i>	<i><object></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>data_area_key.data_module</i>	<i><string></i>		Optional;
<i>data_area_key.data_section</i>	<i><string></i>		Optional;

Type: data_area_status

Status of a data area 'active' indicates a working and available area, 'disabled' indicates that the data area is disabled 'failed' indicates a failure due to the data section's availability might not be fixable without data loss 'unconfigured' indicates a repairable failure 'moving' indicates that the data area is currently being relocated

JSON

```
string
```

Property Name	Type	Description	Notes
<i>data_area_status</i>	<i><string></i>	Status of a data area 'active' indicates a working and available area, 'disabled' indicates that the data area is disabled 'failed' indicates a failure due to the data section's availability might not be fixable without data loss 'unconfigured' indicates a repairable failure 'moving' indicates that the data area is currently being relocated	Values: active, moving, resizing, failed, disabled;

Type: data_section_id

A data section identifier

JSON

```
string
```

Property Name	Type	Description	Notes
<i>data_section_id</i>	<i><string></i>	A data section identifier	

Type: data_section_mode

Data about a data section's mode

JSON

```
{
  "name": string,
  "volume_size_mb": integer
}
```

Property Name	Type	Description	Notes
<i>data_section_mode</i>	<i><object></i>	Data about a data section's mode	
<i>data_section_mode.name</i>	<i><string></i>		Optional;
<i>data_section_mode.volume_size_mb</i>	<i><integer></i>		Optional;

Type: data_section_status

The possible statuses of a data section

JSON

```
string
```

Property Name	Type	Description	Notes
<i>data_section_status</i>	<i><string></i>	The possible statuses of a data section	Values: active, missing, failed, invalid, initializing, uninitialized, unconfigured, unmounted, foreign;

Type: layout_configuration

Customizable parameters for the selected layout

JSON

```

{
  "data_areas": [
    {
      "can_disable": boolean,
      "data_module_name": string,
      "data_section_id": string,
      "elastic": boolean,
      "enabled": boolean,
      "hidden": boolean,
      "index": integer,
      "label": string,
      "max_size_mb": integer,
      "min_size_mb": integer,
      "parent_data_module": string,
      "quota_size_mb": integer,
      "relocatable": boolean,
      "resizable": boolean,
      "resizable_data": boolean,
      "size_locked": [
        string
      ],
      "used_space_mb": integer,
      "valid_data_sections": [
        string
      ]
    }
  ],
  "data_sections": [
    {
      "default_mode": string,
      "encrypted": boolean,
      "id": string,
      "label": string,
      "mode": string,
      "model": string,
      "primary": [
        string
      ],
      "reinitializable": boolean,
      "reinitialize": boolean,
      "roles": [
        string
      ],
      "status": data_section_status,
      "storage_unit": string,
      "supported_modes": [ data_section_mode ],
      "supports_encryption": boolean,
      "total_space_mb": integer
    }
  ],
  "encrypt_storage_units": boolean,
  "encryption_available": boolean,
  "encryption_supported": boolean,
  "session_id": string,
  "valid_data_sections": [
    string
  ]
}

```

Property Name	Type	Description	Notes
<i>layout_configuration</i>	<i><object></i>	Customizable parameters for the selected layout	
<i>layout_configuration.data_areas</i>	<i><array of <object>></i>	A list of all (top-level) data areas assigned to data sections	Optional;
<i>layout_configuration.data_areas[items]</i>	<i><object></i>		
<i>layout_configuration.data_areas[items].can_disable</i>	<i><boolean></i>	If true, this data area can be disabled Its size when disabled will reset to 0	Optional;
<i>layout_configuration.data_areas[items].data_module_name</i>	<i><string></i>		Read-only; Optional;
<i>layout_configuration.data_areas[items].data_section_id</i>	<i><string></i>		Optional;
<i>layout_configuration.data_areas[items].elastic</i>	<i><boolean></i>	If true, this data area resizes automatically to adjust for changes in other data areas on the same volume	Optional;
<i>layout_configuration.data_areas[items].enabled</i>	<i><boolean></i>	If false, this data area is not available for use	Optional;
<i>layout_configuration.data_areas[items].hidden</i>	<i><boolean></i>	If true, this is an internal data area for system use.	Optional;

<code>layout_configuration.data_areas[items].index</code>	<code><integer></code>	The index/ordering of the data area on its data section	Optional;
<code>layout_configuration.data_areas[items].label</code>	<code><string></code>	Human-readable name of the data module	Optional;
<code>layout_configuration.data_areas[items].max_size_mb</code>	<code><integer></code>	Maximum available size of the data area	Read-only; Optional;
<code>layout_configuration.data_areas[items].min_size_mb</code>	<code><integer></code>	Minimum allowed size of the data area	Read-only; Optional;
<code>layout_configuration.data_areas[items].parent_data_module</code>	<code><string></code>	If not the empty string, this data area is considered part of the named data area on the same data section	Read-only; Optional;
<code>layout_configuration.data_areas[items].quota_size_mb</code>	<code><integer></code>	The amount of space allocated for this data area	Optional;
<code>layout_configuration.data_areas[items].relocatable</code>	<code><boolean></code>	Whether the data area can be relocated	Optional;
<code>layout_configuration.data_areas[items].resizable</code>	<code><boolean></code>	True if this data area's quota can be changed	Read-only; Optional;
<code>layout_configuration.data_areas[items].resizable_data</code>	<code><boolean></code>	If false, resizing this data section will result in complete loss of data stored here.	Optional;
<code>layout_configuration.data_areas[items].size_locked</code>	<code><array of <string>></code>	A list of data sections whose data areas for the same data module must be kept the same size.	Optional;
<code>layout_configuration.data_areas[items].size_locked[items]</code>	<code><string></code>		
<code>layout_configuration.data_areas[items].used_space_mb</code>	<code><integer></code>		Read-only; Optional;
<code>layout_configuration.data_areas[items].valid_data_sections</code>	<code><array of <string>></code>	A list of data sections that this data area may be reassigned to TBD: do we offer min/max size here for UI to use? What is the default size after relocation? If this list is empty, the data area cannot be relocated Relocation may be prevented due to data area status or internal settings	Optional;
<code>layout_configuration.data_areas[items].valid_data_sections[items]</code>	<code><string></code>		
<code>layout_configuration.data_sections</code>	<code><array of <object>></code>	Configuration of data sections used in this layout	Optional;
<code>layout_configuration.data_sections[items]</code>	<code><object></code>	Data Section identifier	Required properties: [id, mode];
<code>layout_configuration.data_sections[items].default_mode</code>	<code><string></code>	Default RAID mode for the volume.	Read-only; Optional;
<code>layout_configuration.data_sections[items].encrypted</code>	<code><boolean></code>	True if encryption is enabled.	Read-only; Optional;
<code>layout_configuration.data_sections[items].id</code>	<code><string></code>	Data Section identifier	Read-only;
<code>layout_configuration.data_sections[items].label</code>	<code><string></code>	Data Section name	Read-only; Optional;
<code>layout_configuration.data_sections[items].mode</code>	<code><string></code>	Name of the current storage mode for the data section	
<code>layout_configuration.data_sections[items].model</code>	<code><string></code>	Model of storage unit (if applicable)	Read-only; Optional;
<code>layout_configuration.data_sections[items].primary</code>	<code><array of <string>></code>	Roles for which this data section is primary	Read-only; Optional;
<code>layout_configuration.data_sections[items].primary[items]</code>	<code><string></code>		Read-only;
<code>layout_configuration.data_sections[items].reinitializable</code>	<code><boolean></code>	Whether this data section can be reinitialized	Read-only; Optional;
<code>layout_configuration.data_sections[items].reinitialize</code>	<code><boolean></code>	(Write-only) If true, the data section will be reinitialized into the mode being set	Optional; Default is False;
<code>layout_configuration.data_sections[items].roles</code>	<code><array of <string>></code>	Roles supported by the data section	Read-only; Optional;
<code>layout_configuration.data_sections[items].roles[items]</code>	<code><string></code>		Read-only;
<code>layout_configuration.data_sections[items].status</code>	<code><data_section_status></code>	The possible statuses of a data section	Values: active, missing, failed, invalid, initializing, uninitialized, unconfigured, unmounted, foreign;
<code>layout_configuration.data_sections[items].storage_unit</code>	<code><string></code>	Storage unit name (if applicable)	Read-only; Optional;
<code>layout_configuration.data_sections[items].supported_modes</code>	<code><array of <data_section_mode>></code>	Modes supported by the data section for reinitialization	Read-only; Optional;
<code>layout_configuration.data_sections[items].supported_modes[items]</code>	<code><data_section_mode></code>	Data about a data section's mode	

<i>layout_configuration.data_sections</i> [items].supports_encryption	<boolean>	True if supports encryption features.	Read-only; Optional;
<i>layout_configuration.data_sections</i> [items].total_space_mb	<integer>	Size of the data section in this mode	Read-only; Optional;
<i>layout_configuration.</i> encrypt_storage_units	<boolean>	Encrypt all storage units	Optional;
<i>layout_configuration.</i> encryption_available	<boolean>	Whether encryption is possible for attached Storage Units.	Optional;
<i>layout_configuration.</i> encryption_supported	<boolean>	Whether encryption is supported in the current configuration.	Optional;
<i>layout_configuration.session_id</i>	<string>	Unique identifier for the configured layout	Optional;
<i>layout_configuration.valid_data_sections</i>	<array of <string>>	List of valid data section targets	Optional;
<i>layout_configuration.valid_data_sections</i> [items]	<string>		

Type: layout_configuration_result

JSON

```
{
  "changes": [ layout_diff ],
  "configuration": layout_configuration,
  "customized": boolean,
  "messages": [
    {
      "description": string,
      "severity": string
    }
  ],
  "move_conflict": {
    "conflicting_data_section": string,
    "moving_from": [
      string
    ],
    "moving_to": [
      string
    ],
    <prop>: any
  },
  "valid": boolean
}
```

Property Name	Type	Description	Notes
<i>layout_configuration_result</i>	<object>		Required properties: [valid, changes, configuration, messages];
<i>layout_configuration_result.changes</i>	<array of < <i>layout_diff</i> >>	Differences (expressed as actions to be taken) between the current and proposed layout	
<i>layout_configuration_result.changes</i> [items]	< <i>layout_diff</i> >	A collection of data areas that must be operated on in order to convert one storage layout to another. The order in which those operations take place is additionally specified in the ordering list	
<i>layout_configuration_result.</i> configuration	< <i>layout_configuration</i> >	Customizable parameters for the selected layout	
<i>layout_configuration_result.customized</i>	<boolean>	If true, the validated settings customize the layout.	Read-only; Optional;
<i>layout_configuration_result.messages</i>	<array of <object>>	A list of errors or notice(s) that the user should be aware of	
<i>layout_configuration_result.messages</i> [items]	<object>		
<i>layout_configuration_result.messages</i> [items].description	<string>		Optional;
<i>layout_configuration_result.messages</i> [items].severity	<string>	How severe each message is for the user "info" described a simple fact, "notice" warns the user about something they should be aware of, "error" describes something preventing successful configuration	Optional; Values: info, notice, error;
<i>layout_configuration_result.</i> move_conflict	<object>	If present, gives information about conflicting move operations.	Required properties: [conflicting_data_section, moving_to, moving_from]; Optional;
<i>layout_configuration_result.</i> move_conflict.conflicting_data_section	<string>	The data section involved in the conflict.	

<i>layout_configuration_result.move_conflict.moving_from</i>	<i><array of <string>></i>	Data modules being moved from the conflict data section.	
<i>layout_configuration_result.move_conflict.moving_from[items]</i>	<i><string></i>		
<i>layout_configuration_result.move_conflict.moving_to</i>	<i><array of <string>></i>	Data modules being moved to the conflict data section.	
<i>layout_configuration_result.move_conflict.moving_to[items]</i>	<i><string></i>		
<i>layout_configuration_result.move_conflict.<prop></i>	<i><any></i>		Optional;
<i>layout_configuration_result.valid</i>	<i><boolean></i>	False if proposed configuration is invalid	

Type: layout_diff

A collection of data areas that must be operated on in order to convert one storage layout to another. The order in which those operations take place is additionally specified in the ordering list

JSON

```
{
  "create": [
    {
      "data_area": data_area_key,
      "enabled": boolean,
      "quota_size_mb": integer
    }
  ],
  "delete": [
    {
      "data_area": data_area_key
    }
  ],
  "disable": [
    {
      "data_area": data_area_key
    }
  ],
  "enable": [
    {
      "data_area": data_area_key
    }
  ],
  "grow": [
    {
      "data_area": data_area_key,
      "quota_size_mb": integer
    }
  ],
  "move": [
    {
      "data_area": data_area_key,
      "data_section": string
    }
  ],
  "ordering": [
    string
  ],
  "reinitialize": [
    {
      "id": string,
      "mode": string
    }
  ],
  "shrink": [
    {
      "data_area": data_area_key,
      "quota_size_mb": integer
    }
  ]
}
```

Property Name	Type	Description	Notes
<i>layout_diff</i>	<i><object></i>	A collection of data areas that must be operated on in order to convert one storage layout to another. The order in which those operations take place is additionally specified in the ordering list	
<i>layout_diff.create</i>	<i><array of <object>></i>		Optional;

<i>layout_diff.create[items]</i>	<i><object></i>		
<i>layout_diff.create[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.create[items].enabled</i>	<i><boolean></i>		Optional;
<i>layout_diff.create[items].quota_size_mb</i>	<i><integer></i>		Optional;
<i>layout_diff.delete</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.delete[items]</i>	<i><object></i>		
<i>layout_diff.delete[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.disable</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.disable[items]</i>	<i><object></i>		
<i>layout_diff.disable[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.enable</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.enable[items]</i>	<i><object></i>		
<i>layout_diff.enable[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.grow</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.grow[items]</i>	<i><object></i>		
<i>layout_diff.grow[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.grow[items].quota_size_mb</i>	<i><integer></i>		Optional;
<i>layout_diff.move</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.move[items]</i>	<i><object></i>		
<i>layout_diff.move[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.move[items].data_section</i>	<i><string></i>		Optional;
<i>layout_diff.ordering</i>	<i><array of <string>></i>	A list of the property names on this object, in the order in which those operations will be performed.	Optional;
<i>layout_diff.ordering[items]</i>	<i><string></i>		
<i>layout_diff.reinitialize</i>	<i><array of <object>></i>	The list of data sections, and the target modes, that will be reinitialized	Optional;
<i>layout_diff.reinitialize[items]</i>	<i><object></i>		
<i>layout_diff.reinitialize[items].id</i>	<i><string></i>		Optional;
<i>layout_diff.reinitialize[items].mode</i>	<i><string></i>		Optional;
<i>layout_diff.shrink</i>	<i><array of <object>></i>		Optional;
<i>layout_diff.shrink[items]</i>	<i><object></i>		
<i>layout_diff.shrink[items].data_area</i>	<i><data_area_key></i>	The pair of Data Module name and Data Section ID that uniquely identifies a data area	
<i>layout_diff.shrink[items].quota_size_mb</i>	<i><integer></i>		Optional;