

# API for System State v1 (Direct Sales)

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## Overview

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An API to retrieve the model for a configured product based on a system model. This API is an optional feature activated with the [license](#).

## API General Info

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### Response Content Type

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It is possible to switch between `json` and `xml` response types by setting an `Accept` header to either `application/json` or `application/xml` respectively.

## Successful Responses

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### Response Codes

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- **200** - The request was executed successfully and the server returned some data. The return content type is specified inside a response header called `content-type`. Example content types are `application/xml`, `application/json`, `application/zip` and `text/plain`.
- **204** - The request was executed successfully and the server returned no data. If the `Location` header was present then the server responded with a redirect.

## Error Responses

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If the API call resulted in an error then the error code will be returned along with the error object in the response body. The error object contains the attributes listed below:

- **type** - type of the error
- **cause** - the root cause of the error
- **message** - message containing details of the related error
- **uuid** - a unique identifier of the error which also may appear in the exception logs
- **timestamp** - the time of the error

**Note:** For chunked responses, the socket will be closed prematurely if an error occurs after the initial chunk containing the status code has been sent.

### Response Codes

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- **400** - The request contains invalid parameters or there are invalid settings. Consult the error message and/or check Administration for invalid settings.
- **401** - The user is not authenticated.
- **403** - The user is not authorized access to the specified endpoint.
- **404** - The specified endpoint does not exist or a request parameter is invalid. Consult the error message.
- **405** - The specified endpoint does not support the requested operation. Consult the error message.
- **409** - The specified endpoint is in a state incompatible with the requested operation. Consult the error message.
- **500** - Unknown error occurred while processing the request. Consult the CPQ logs for more information.
- **504** - The specified concurrent calls limit was exceeded and the server was not able to serve the response in a specified timeout limit. That error is always served with the xml body containing the description.

## Endpoints by Category

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### System Configuration

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#### **GET /api/system/v1/configuredproduct/{id}/model**

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Retrieve System Model for a Configured Product based on a System Model

Parameter	Type	Description
id	String	The weak reference of the configured product resource.
<i>Result</i>	<a href="#">SystemModel</a>	System model.

## Data Types by Category

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### System Configuration

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#### **SystemModel**

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```
{
  "name" : "",
  "id" : "",
  "description" : "",
  "nodetypes" : [
    {
      "id" : "",
      "name" : "",
      "description" : "",
      "displayAttribute" : "",
      "nodeType" : "",
      "minQty" : 1,
      "maxQty" : 1,
      "attributes" : [
        {
          "id" : "",
          "name" : "",
          "description" : "",
          "type" : "",
          "domain" : ""
        },
        ...
      ],
      "ports" : [
        {
          "id" : "",
          "name" : "",
          "description" : "",
          "minQty" : 1,
          "maxQty" : 1
        },
        ...
      ],
      "assembly" : "",
      "assemblyOutputs" : [
        {
          "id" : "",
          "name" : "",
          "domain" : "",
          "type" : ""
        },
        ...
      ],
      "modelFileOutputs" : [
        {
          "id" : "",
          "name" : "",
```

```
        "domain" : ""
    },
    ...
]
},
...
],
"globals" : [
    {
        "id" : "",
        "name" : "",
        "description" : "",
        "type" : "",
        "domain" : ""
    },
    ...
],
"connections" : [
    {
        "name" : "",
        "id" : "",
        "description" : "",
        "portA" : [
            {
                "node" : "",
                "port" : ""
            },
            ...
        ],
        "portB" : [
            {
                "node" : "",
                "port" : ""
            },
            ...
        ]
    },
    ...
]
}
```