API Specification Doc

(VGrid)

Version	Date	Author	Description
2.0.0	28 February	Solusi247	
	2017		

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Methods

A. User Management

User Management is used to manage user, group, member, and role on VGrid.

1. User

1.1. Get User by ID

This method is used to get user information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/user/{user_id}
	Example :
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/user/1

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{user_id}	Integer

```
Status
                                       Response
  0
           "err_code": 0,
           "data": [
                 "user_id": 1,
                 "user_firstname": "Danang",
                 "user_lastname": "Kastowo",
                 "user_email": "danang.kastowo@solusi247.com",
                 "user_apikey": "90867b984d2a5038ee21a190996b900b",
                 "user_ip_address":
         "192.168.1.80,192.168.1.72,192.168.1.75",
                 "user_create_date": "2016-10-17 00:00:00",
                 "user_update_date": "2017-02-16 10:47:48",
                 "user_is_active": "true",
                 "user_cluster_id": "null"
          ]
         }
  2
           "err_code": 2,
           "err_msg": "User ID is not found"
         }
  2
```

```
"err_code": 2,
    "err_msg": "User ID must be numeric"
}

500 {
    "err_code": 500,
    "err_msg": "Wrong apikey"
    }

5  {
    "err_code": 5,
    "err_msg": "Access denied to view users"
    }

5  {
    "err_msg": "Access denied to view users"
    }

6  {
    "err_msg": "IP Address is not registered
    }
```

1.2. Get All User

This method is used to get all user information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/user
	Example :
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/user

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

```
},
                "user_id": 2,
                "user_firstname": "anang",
                "user_lastname": "andrianto",
                "user_email": "anangandrianto29@solusi247.com",
                "user_apikey": "608523311f1d8a90e0fc332f8297dabd",
                "user_ip_address": "192.168.1.75",
                "user_create_date": "2017-03-08 11:14:29",
                "user_update_date": "2017-03-20 13:35:11",
                "user_is_active": "true",
                "user_cluster_id": "null"
         ]
         }
500
          "err_code": 500,
          "err_msg": "Wrong apikey"
5
          "err_code": 5,
          "err_msg": "Access denied to view users"
4
          "err_code": 4,
          "err_msg": "IP Address is not registered
```

1.3. Add User

This method is used to add new user.

Method	URL
POST	host:port/{apikey}/user
	Example:
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/user
	r .
	{
	"user_firstname": "rafida",
	"user_lastname": "anggraini",
	"user_email": "rafida.anggraini@solusi247.com",
	"user_password": "rafida123",
	"user_ip_address": "192.168.1.75"
	}

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer

{apikey} String

Status	Response
0	<pre>{ "err_code": 0, "data": [</pre>
3	{ "err_code": 3, "err_msg": "Access denied" }
2	{ "err_code": 2, "err_msg": "Email is already exist" }
2	{ "err_code": 2, "status": "First name is required" }
3	{ "err_code": 3, "err_msg": "Email is invalid" }
2	{ "err_code": 2, "status": "Password is invalid" }
2	{ "err_code": 2, "status": "IP address is invalid" }
4	{ "err_code": 4, "err_msg": "IP Address is not registered }

1.4. Update User

This method is used to update user information.

- Request

```
        PUT
        host:port/{apikey}/user/{user_id}

        Example :
        192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/user/5

        {
        "user_firstname": "rafida",

        "user_lastname": "anggraini",
        "user_email": "rafida.anggraini123@solusi247.com",

        "user_password": "rafida123",
        "user_ip_address": "192.168.1.75"

        }
```

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{user_id}	Integer

```
Status
                                        Response
  0
           "err_code": 0,
           "data": [
                  "user_id": 5,
                  "user_firstname": "rafida",
                  "user lastname": "anggraini",
                  "user_email": "rafida.anggraini123@solusi247.com",
                  "user_apikey": "485bebcc299a94cea3103c7acc0cd142",
                  "user_ip_address": "192.168.1.75",
                  "user create date": "2017-03-29 13:51:53",
                  "user update date": "null",
                  "user_is_active": "true",
                  "user_cluster_id": "null"
                  }
           ]
          }
  3
           "err_code": 3,
           "err_msg": "Access denied"
  2
          {
           "err_code": 2,
```

```
"err_msg": "User ID is not found"
 2
          "err_code": 2,
          "err_msg": "User ID must be numeric"
 2
          "err_code": 2,
          "err_msg": "Email is already exist"
 2
          "err_code": 2,
          "status": "First name is required"
500
          "err_code": 500,
          "err_msg": "Body cannot Empty"
 3
          "err_code": 3,
          "err_msg": "Email is invalid"
 2
          "err_code": 2,
          "status": "Password is invalid"
 2
          "err_code": 2,
          "status": "IP address is invalid"
 4
          "err_code": 4,
          "err_msg": "IP Address is not registered
```

1.5. Delete User

This method is used to delete user.

Method	URL
DELETE	{host}:{port}/{apikey}/user/{user_id}
	Exampel: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/user/5

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer

{apikey}	String
{user_id}	Integer

Status	Response
0	{
	"err_code": 0,
	"status": "User has been deleted"
	}
2	{
	"err_code": 2,
	"err_msg": "User ID must be numeric"
	}
2	{
	"err_code": 2,
	"err_msg": "User ID is not found"
	}
500	{
	"err_code": 500,
	"err_msg": "Wrong apikey"
	}
3	{
	"err_code": 3,
	"err_msg": "Access denied. Cannot delete this user"
	}
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered
	}

2. Group

2.1. Get Group by ID

This method is used to get group information.

Method	URL
GET	host:port/{apikey}/group/{group_id}
	example :
	192.168.1.230:7001/485bebcc299a94cea3103c7acc0cd142/group/1

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{group_id}	Integer

Status	Response
0	{ "err_code": 0, "data": [{ "group_id": 1, "group_name": "david_group", "group_is_active": "true", "group_status": "false", "group_create_date": "2017-03-08 11:16:05", "group_update_date": "2017-03-20 14:26:32" }]] }
2	{ "err_code": 2, "err_msg": "Group ID is not found" }
2	{ "err_code": 2, "err_msg": "Group ID must be numeric" }
500	{ "err_code": 500, "err_msg": "Wrong apikey" }
4	{ "err_code": 4, "err_msg": "IP Address is not registered }

2.2. Get All Group

This method is used to get all group information.

Method	URL
GET	{host}:{port}/{apikey}/group
	Example :
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

Status	Response
0	{ "err_code": 0, "data": [{ "group_id": 1, "group_name": "david_group", "group_is_active": "true", "group_status": "false", "group_create_date": "2017-03-08 11:16:05", "group_update_date": "2017-03-20 14:26:32" }] }
4	{ "err_code": 4, "err_msg": "IP Address is not registered }
500	{ "err_code": 500, "err_msg": "Wrong apikey" }

2.3. Get Group by User

This method is used to get group information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/group/{group_id}/user/{user_id}
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group/1/cer/2

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{group_id}	Integer
	{user id}	Integer

Status	Response
0	{
	"data": [

```
"group_id": 1,
                 "group_name": "david_group",
                "group_is_active": "true",
                 "group_status": "false",
                "group_create_date": "2017-03-08 11:16:05",
                 "group_update_date": "2017-03-20 14:26:32"
1
                "err_code": 1,
                "status": "User ID is not found"
2
                "err_code": 2,
                "err_msg": "User ID must be numeric"
2
                "err_code": 2,
                "err_msg": "Group ID is not found"
2
                "err_code": 2,
                "err_msg": "Group ID must be numeric"
4
                "err_code": 4,
                "err_msg": "IP Address is not registered
500
                "err code": 500,
                "err_msg": "Wrong apikey"
```

2.4. Add Group

This method is used to add new group.

```
        Method
        URL

        POST
        {host}:{port}/{apikey}/group

        Example:
        192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group

        {
        "group_name": "Labs247", "group_status": true

        }
        "group_status": true
```

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

```
Status
                                        Response
  0
           "err_code": 0,
           "data": [
              "group_id": 4,
              "group_name": "Labs247",
              "group_is_active": "true",
             "group_status": "true",
             "group_create_date": "2017-03-30 05:00:19",
              "group_update_date": "null"
  2
           "err_code": 2,
           "status": "Group name is required"
  2
           "err_code": 2,
           "status": "Group status is required"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
```

2.5. Update Group

This method is used to update group information.

Method	URL	
PUT	{host}:{port}/{apikey}/group/{group_id}	
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group/1	

```
"group_name": "LabsSolusi247",
"group_status": true
}
```

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{group_id}	Integer

```
Status
                                       Response
  0
                 "err_code": 0,
                 "data": [
                   "group_id": 4,
                   "group_name": "LabsSolusi247",
                   "group_is_active": "true",
                   "group_status": "true",
                   "group_create_date": "2017-03-30 05:00:19",
                   "group_update_date": "2017-03-30 05:07:59"
                 ]
  3
                 "err_code": 3,
                 "status": "Parameters cannot Empty"
  4
                 "err_code": 4,
                 "err_msg": "IP Address is not registered
 500
                 "err_code": 500,
                 "err_msg": "Wrong apikey"
```

2.6. Delete Group

This method is used to delete group.

Method	URL	
DELETE	{host}:{port}/{apikey}/group/{group_id}	
Exampel: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/		

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{group_id}	Integer

Status	Response
0	{
	"err_code": 0,
	"status": "Group has been deleted"
	}
1	{
	"err_code": 1,
	"status": "Group ID is not found"
	}
3	{
	"err_code": 3,
	"err_msg": "Group ID must be numeric"
	}
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered
	}
500	{
	"err_code": 500,
	"err_msg": "Wrong apikey"
	}

3. Member

3.1. Get Member

This method is used to get member information.

Method	URL	
GET	{host}:{port}/{apikey}/group/{group_id}/member	
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group/1/cember	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer

{apikey}	String
{group_id}	Integer

```
Status
                                       Response
  0
           "err_code": 0,
           "data": [
                 {
             "member_id": 3,
             "group_name": "LabsSolusi247",
             "user_id": 1,
             "user_firstname": "Danang",
             "user_lastname": "Kastowo",
             "user_email": "danang.kastowo@solusi247.com",
             "member_status": "Active",
             "member_status_request": "Confirm",
             "member_role": "Administrator"
           ]
          }
  3
           "err_code": 3,
           "err_msg": "Group ID must be numeric"
  3
           "err_code": 3,
           "err_msg": "Group ID is not found"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
```

3.2. Add Member

This method is used to add new member to a group.

Method	URL	
POST	{host}:{port}/{apikey}/group example :	
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/memb	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

Response

```
Status
                                        Response
  0
           "err_code": 0,
           "data": {
                  "member_id": 4,
                  "group_name": "LabsSolusi247",
                  "user_id": 5,
                  "user_firstname": "rafida",
                  "user_lastname": "anggraini",
                  "user_email": "rafida.anggraini@solusi247.com",
                  "member_status": "Active",
                  "member_status_request": "confirm",
                  "member_role": "Member"
           }
          }
 500
           "err_code": 500,
           "status": "User ID is not found"
  1
           "err_code": 1,
           "status": "Group id is not found"
 500
          {
           "err_code": 500,
           "status": "User is already member in this group"
  3
           "err_code": 3,
           "err_msg": "Access denied"
  2
           "err_code": 2,
           "err_msg": "Member is already exist"
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
```

```
4 {
    "err_code": 4,
    "err_msg": "IP Address is not registered
}
```

3.3. Update Member

This method is used to update member information.

- Request

Method	URL	
PUT	host:port/{apikey}/member/{member_id}	
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/member/	
	{ "user_id": 5, "group_id":1	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{member_id}	Integer

```
Status
                                       Response
  0
           "err_code": 0,
           "data": {
                  "member_id": 4,
                 "group_name": "VGrid",
                 "user_id": 5,
                 "user_firstname": "rafida",
                 "user_lastname": "anggraini",
                 "user_email": "rafida.anggraini@solusi247.com",
                 "member_status": "Active",
                 "member_status_request": "confirm",
                 "member_role": "Member"
          }
          }
 500
           "err_code": 500,
           "status": "User ID is not found"
```

```
1
        {
          "err_code": 1,
          "status": "Group id is not found"
 3
          "err_code": 3,
          "err_msg": "Member ID must be numeric"
 3
          "err_code": 3,
          "err_msg": "Member ID is not found"
 2
          "err_code": 2,
          "err_msg": "Member is already exist"
500
         {
          "err_code": 500,
          "err_msg": "Wrong apikey"
 4
          "err_code": 4,
          "err_msg": "IP Address is not registered
```

3.4. Delete Member

This method is used to delete member from a group.

- Request

Method	URL
DELETE	host:port/{apikey}/group/{group_id}/member/{member_id}
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group/2/uember/3

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
	{apikey}	String
	{group_id}	Integer
	{member_id}	Integer

Status	Response
0	{
	"err_code": 0,

	"status": "Member has been deleted"
	l l
	J
3	{
	"err code": 3,
	"err_msg": "Member ID must be numeric"
	en_msg . Wember in must be numeric
	}
3	{
	"err code": 3,
	<u> </u>
	"err_msg": "Member ID is not found"
	}
500	{
	"err_code": 500,
	"err_msg": "Wrong apikey"
	1
	ĵ.
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered
	}

4. Role

4.1. Get Role by ID

This method is used to get role information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/group/{group_id}/member
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/group/1/r
	ember

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
UKL_PAKAIVIS	{apikey}	String
	{role_id}	Integer

```
Status Response

O {
    "err_code": 0,
    "data": [
    {
        "role_id": 1,
        "role_name": "Administrator",
        "role_create_date": "2017-02-16 10:46:00",
```

```
"role_update_date": "null"
}

2
{
    "err_code": 2,
    "err_msg": "Role id is not found"
}

3
{
    "err_code": 3,
    "err_msg": "Role ID must be numeric"
}

500
{
    "err_code": 500,
    "err_msg": "Wrong apikey"
}

4
{
    "err_code": 4,
    "err_msg": "IP Address is not registered
}
```

4.2. Get All Role

This method is used to get all role information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/role
	Example :
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/role

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

```
Status

Response

("err_code": 0,
    "data": [
    {
        "role_id": 1,
        "role_name": "Administrator",
        "role_create_date": "2017-02-16 10:46:00",
        "role_update_date": "null"
        }
    ]
```

	}
500	{
	"err_code": 500,
	"err_msg": "Wrong apikey"
	}
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered
	}

4.3. Add Role

This method is used to add new role.

- Request

Method	URL
POST	{host}:{port}/{apikey}/role
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/role
	{ "role_name": "Member" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

```
Response
Status
  0
           "err_code": 0,
           _
"data": [
                  "role_id": 2,
                 "role_name": "Member",
                  "role_create_date": "2017-03-29 17:17:08",
                  "role_update_date": "null"
           ]
          }
  2
           "err_code": 2,
           "status": "Role name is required"
          }
 500
```

4.4. Update Role

This method is used to update role information.

- Request

Method	URL
PUT	host:port/{apikey}/role/{role_id}
	Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/role/2
	{ "role_name": "Customer" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{role_id}	Integer

```
Status
                                       Response
  0
                 "err_code": 0,
                 "data": [
                 "role_id": 2,
                 "role_name": "Customer",
                 "role_create_date": "2017-03-29 17:17:08",
                 "role_update_date": "2017-03-29 17:21:04"
                 }
                 ]
  2
                 "err_code": 2,
                 "err_msg": "Role name is empty"
  2
                 "err_code": 2,
```

	"err_msg": "Role ID is not found"	
	}	
3	{ "err_code": 3, "err_msg": "Role ID must be numeric" }	
500	{ "err_code": 500, "err_msg": "Wrong apikey" }	
4	{ "err_code": 4, "err_msg": "IP Address is not registered }	

4.5. Delete Role

This method is used to delete role.

- Request

Method	URL	
DELETE	host:port/{apikey}/role/{role_id}	
	Exampel: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/role/2	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{role_id}	Integer

Status	Response	
0	{	
	"err_code": 0, "status": "Role has been deleted"	
	}	
2	{	
	"err_code": 2,	
	"err_msg": "Role ID is not found"	
	}	
3	{	
	"err_code": 3,	
	"err_msg": "Role ID must be numeric"	
	}	
500	{	
	"err_code": 500,	

	"err_msg": "Wrong apikey" }	
4	{ "err_code": 4, "err_msg": "IP Address is not registered }	

B. Cluster

Cluster is used to manage cluster and cluster configuration on VGrid.

1. Cluster

1.1. Get All Cluster

This method is used to get all cluster information.

- Request

Method	URL	
GET	{host}:{port}/{apikey}/cluster	
	Example :	
	192.168.1.230:7002/90867b984d2a5038ee21a190996b900b/cluster	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

- Response

```
Response
Status
  0
           "err_code": 0,
           "data": [
                  "cluster_id": 1,
                  "cluster_name": "Yava02",
                  "cluster_status": "default",
                  "cluster_create_date": "2017-01-17 00:00:00",
                  "cluster_update_date": "2017-02-16 09:30:42"
                  }
           ]
          }
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
```

1.1. Get Cluster by ID

This method is used to get cluster information.

Method	URL	
GET	{host}:{port}/{apikey}/cluster/{cluster_id}	
	Example:	
	192.168.1.230:7002/90867b984d2a5038ee21a190996b900b/cluster/1	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{cluster_id}	Integer

- Response

```
Status
                                        Response
  0
           "err_code": 0,
           "data": [
                  "cluster_id": 1,
                  "cluster_name": "Yava02",
                  "cluster_status": "default",
                  "cluster_create_date": "2017-01-17 00:00:00",
                  "cluster_update_date": "2017-02-16 09:30:42"
                 }
           ]
          }
  2
           "err_code": 2,
           "err_msg": "Cluster ID must be numeric"
  2
          {
           "err_code": 2,
           "err_msg": "Cluster ID is not found"
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
```

1.2. Add Cluster

This method is used to add new cluster.

Method	URL	
POST	{host}:{port}/{apikey}/cluster	
	Example : 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/cluster	
	{ "cluster_name": "Yava01", "cluster_status": "default" }	

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
	{apikey}	String

- Response

```
Status
                                        Response
  0
           "err_code": 0,
           "data": [
                  "cluster_id": 2,
                  "cluster_name": "Yava01",
                  "cluster_status": "default",
                  "cluster_create_date": "2017-03-29 17:32:37",
                  "cluster_update_date": "null"
           ]
          }
 500
           "err_code": 1,
           "err_msg": "Cluster name is required"
 500
           "err_code": 500,
           "err_msg": "Wrong apikey"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
```

1.3. Update Cluster

This method is used to update cluster information.

Method	URL
PUT	host:port/{apikey}/cluster/{cluster_id}
Example: 192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/cluster/	
{ "cluster_name": "Yava011", "cluster_status": "default" }	

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
UKL_PAKAIVIS	{apikey}	String
	{cluster_id}	Integer

- Response

```
Status
                                       Response
  0
                 "err_code": 0,
                 "data": [
                  "cluster_id": 2,
                  "cluster_name": "Yava011",
                  "cluster_status": "default",
                  "cluster_create_date": "2017-03-29 17:32:37",
                  "cluster_update_date": "2017-03-29 17:37:06"
                 }
                 ]
 500
                 "err_code": 1,
                 "err_msg": "Cluster name is required"
 500
                 "err_code": 500,
                 "err_msg": "Wrong apikey"
  4
                 "err_code": 4,
                 "err_msg": "IP Address is not registered
```

1.4. Delete Cluster

This method is used to delete cluster.

Method	URL
DELETE	host:port/{apikey}/cluster/{cluster_id}
	Example :
	192.168.1.230:7001/90867b984d2a5038ee21a190996b900b/cluster/2

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
UKL_PAKAIVIS	{apikey}	String
	{cluster_id}	Integer

- Response

Status	Response
0	{
	"err_code": 0,
	"status": "Cluster has been deleted"
	}
2	{
	"err_code": 2,
	"err_msg": "Cluster ID must be numeric"
	}
2	{
	"err_code": 2,
	"err_msg": "Cluster ID is not found"
	}
500	{
	"err_code": 500,
	"err_msg": "Wrong apikey"
	}
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered
	}

2. Cluster Config

2.1. Get All Cluster Config

This method is used to get all cluster configuration.

Method	URL	
GET	{host}:{port}/{apikey}/cluster/{cluster_id}/config	
	Example :	
	192.168.43.20:7002/90867b984d2a5038ee21a190996b900b/cluster/1/	

onfig	
-------	--

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
LIDL DADAMS	{port}	Integer
URL_PARAMS	{apikey}	String
	{cluster_id}	Integer

```
Status
                                        Response
  0
          {
           "errcode": 0,
           "data": [
              "cluster_id": 1,
              "cluster_name": "Yava02",
              "cluster_status": "default",
              "config_id": 1,
              "config_key": "usernameOozie",
              "config_value": "yava",
              "config_create_date": "2017-02-01 06:08:04",
              "config_update_date": "2017-02-17 17:17:56"
           ]
  2
           "err_code": 2,
           "err_msg": "Cluster ID must be numeric"
  3
           "err_code": 3,
           "err_msg": "Cluster ID must be numeric"
 500
          {
           "err_code": 500,
           "err_msg": "Wrong apikey"
  4
           "err_code": 4,
           "err_msg": "IP Address is not registered
```

2.2. Get Cluster Config

This method is used to get cluster configuration.

Method	LIRI	
IVIATROG		

GET	{host}:{port}/{apikey}/cluster/{cluster_id}/config/{config_id}	
	Example: 192.168.43.20:7002/90867b984d2a5038ee21a190996b900b/cluster/1/onfig/1	

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
	{port}	Integer
URL_PARAMS	{apikey}	String
	{cluster_id}	Integer
	{config_id}	Integer

```
Status
                                        Response
  0
           "err_code": 0,
           "data": [
              "cluster_id": "1",
             "cluster_name": "Yava02",
             "cluster_status": "default",
              "config_id": 1,
              "config_key": "usernameOozie",
              "config_value": "yava",
              "config_create_date": "2017-02-01 06:08:04",
             "config_update_date": "2017-02-17 17:17:56"
           ]
  2
           "err_code": 2,
           "err_msg": "Cluster ID must be numeric"
  2
           "err_code": 2,
           "err_msg": "Cluster ID is not found"
  6
          {
           "err_code": 6,
           "err_msg": "Config ID must be numeric"
  4
           "err_code": 4,
           "err_msg": "Configuration is not found in this cluster"
 500
           "err_code": 500,
```

```
"err_msg": "Wrong apikey"
}

4  {
    "err_code": 4,
    "err_msg": "IP Address is not registered
}
```

2.3. Add Cluster Config

This method is used to add new cluster configuration.

- Request

Method	URL
POST	{host}:{port}/{apikey}/cluster/{cluster_id}
Example: 192.168.43.20:7002/90867b984d2a5038ee21a190996b900b/clust onfig	
	{ "config_key": "usernameHdfs", "config_value": "yava" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{cluster_id}	Integer

```
Status
                                        Response
  0
            "err_code": 0,
           "data": [
            {
              "cluster_id": "2",
              "cluster_name": "Yava01",
              "cluster_status": "default",
              "config_id": 14,
              "config_key": "usernameHdfs",
              "config_value": "yava",
              "config_create_date": "2017-03-29 08:30:05",
              "config_update_date": "null"
           ]
  1
```

2.4. Update Cluster Config

This method is used to update cluster configuration.

- Request

Method	URL
PUT	host:port/{apikey}/cluster/{cluster_id}/config/{config_id}
	Example: 192.168.43.20:7002/90867b984d2a5038ee21a190996b900b/cluster/2/onfig/14
	{ "config_key": "usernameHdfs1", "config_value": "hadoop" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{cluster_id}	Integer
	{config_id}	Integer

```
Status Response

0 {
    "err_code": 0,
    "data": [
    {
        "cluster_id": "2",
        "cluster_name": "Yava01",
```

```
"cluster_status": "default",
             "config_id": 14,
             "config_key": "usernameHdfs1",
             "config_value": "hadoop",
            "config_create_date": "2017-03-29 08:32:35",
             "config_update_date": "null"
          ]
 2
          "err code": 2,
          "err_msg": "Cluster ID must be numeric"
 2
          "err_code": 2,
          "err_msg": "Cluster ID is not found"
 6
          "err_code": 6,
          "err_msg": "Config ID must be numeric"
 4
         {
          "err code": 4,
          "err_msg": "Configuration is not found in this cluster"
 1
          "err code": 1,
          "err_msg": "Configuration key is required"
 1
          "err_code": 1,
          "err_msg": "Configuration value is required"
500
          "err_code": 500,
          "err_msg": "Wrong apikey"
 4
          "err_code": 4,
          "err_msg": "IP Address is not registered
```

2.5. Delete Cluster Config

This method is used to delete cluster configuration.

Method	URL
DELETE	host:port/{apikey}/cluster/{cluster_id}/config/{config_id}
	Example :

192.168.43.20:7002/90867b984d2a5038ee21a190996b900b/cluster/2/onfig/14

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{cluster_id}	Integer
	{config_id}	Integer

Status	Response
0	{
	"status": "Configuration has been deleted" }
2	{ "err code": 2,
	"err_msg": "Cluster ID must be numeric" }
2	{ "err_code": 2,
	"err_msg": "Cluster ID is not found" }
6	{ "err code": 6,
	"err_msg": "Config ID must be numeric"
4	{ "err code": 4,
	"err_msg": "Configuration is not found in this cluster" }
500	{ "err_code": 500,
	"err_msg": "Wrong apikey"
4	{
	"err_code": 4,
	"err_msg": "IP Address is not registered }

C. Project

Project is used to manage project and inventory on VGrid.

1. Project

1.1. Get Project by User

This method is used to get project information based on Project ID and User ID.

- Request

Method	URL
GET	{host}:{port}/{apikey}/project/{project_id}/user/{user_id}
	Example :
	192.168.1.230:7003/90867b984d2a5038ee21a190996b900b/project/4, user/2

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{project_id}	Integer
	{user_id}	Integer

```
Status
                                        Response
  0
          {
           "err_code": 0,
           "data": [
              "project_id": "4",
              "project_name": "project_SCL",
             "project_create_date": "2017-03-20 19:16:22",
              "project_update_date": "2017-03-30 11:13:21",
              "project_is_share": "true",
             "user_id": "2"
            }
           ]
          }
  5
           "err_code": 5,
           "err_msg": "Project ID must be numeric"
  2
           "err_code": 2,
           "err_msg": "Project is not found"
  5
          {
           "err_code": 5,
```

1.2. Get All Project by User

This method is used to get all project information based on User ID.

- Request

Method	URL		
GET	{host}:{port}/{apikey}/project/user/{user_id}		
	Example :		
	192.168.1.230:7003/90867b984d2a5038ee21a190996b900b/project/		
	user/2		

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{user_id}	Integer

```
"err_code": 2,
2
          "err_msg": "No project for this user"
          "err_code": 5,
5
          "err_msg": "User ID must be numeric"
         {
          "err_code": 1,
1
          "err_msg": "Access denied. Cannot access this project"
          "err_code": 2,
2
          "err_msg": "No project for this user"
         {
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
         {
          "err code": 4,
4
          "err_msg": "IP Address is not registered
```

1.3. Get Project by Group

This method is used to get project information based on Project ID and Group ID.

- Request

Method	URL
GET	{host}:{port}/{apikey}/project/{project_id}/group/{group_id}
	Example: 192.168.1.230:7003/90867b984d2a5038ee21a190996b900b/project/4, group/1

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{project_id}	Integer
	{group_id}	Integer

```
Status
                                        Response
           "err_code": 0,
           "data": [
              "project_id": "4",
              "project_name": "project_SCL",
  0
              "project_create_date": "2017-03-20 19:16:22",
              "project_update_date": "2017-03-30 11:13:21",
              "project_is_share": "true",
              "group_id": "1"
            }
           ]
           "err code": 5,
  5
           "err_msg": "Project ID must be numeric"
          {
           "err_code": 2,
  2
           "err_msg": "Project is not found"
           "err_code": 5,
  5
           "err_msg": "Group ID must be numeric"
          {
           "err_code": 1,
  1
           "err_msg": "Access denied. Cannot access this project"
          {
           "err_code": 500,
 500
           "err_msg": "Wrong apikey"
           "err_code": 4,
  4
           "err_msg": "IP Address is not registered
```

1.4. Get All Project by Group

This method is used to get all project information based on Group ID.

- Request

Method	URL		
GET	{host}:{port}/{apikey}/project/group/{group_id}		
	Example: 192.168.1.230:7003/90867b984d2a5038ee21a190996b900b/project/group/1		

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
LIDI DADAMS	{port}	Integer
URL_PARAMS	{apikey}	String
	{group_id}	Integer

```
Status
                                        Response
           "err_code": 0,
           "data": [
              "project_id": "4",
             "project_name": "project_SCL",
  0
              "project_create_date": "2017-03-20 19:16:22",
              "project_update_date": "2017-03-30 11:13:21",
             "project_is_share": "true",
              "group_id": "1"
            }
           ]
           "err_code": 2,
  2
           "err_msg": "Project is not found"
          {
           "err_code": 5,
  5
           "err_msg": "Group ID must be numeric"
           "err_code": 1,
  1
           "err_msg": "Access denied. Cannot access this project"
           "err_code": 500,
 500
           "err_msg": "Wrong apikey"
```

```
4
    "err_code": 4,
    "err_msg": "IP Address is not registered
}
```

1.5. Add Project

This method is used to add new project.

- Request

Method	URL
GET	{host}:{port}/{apikey}/project/user/{user_id}
	Example: 192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/project/use//2 { "project_name": "orm" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{user_id}	Integer

```
Status
                                        Response
           "err_code": 0,
           "data": {
             "project_id": 11,
            "project_name": "orm",
            "project_create_date": "2017-03-30 12:35:42",
  0
             "project_update_date": "null",
             "project_is_share": "false",
            "user_id": 2,
            "group_id": "null"
           }
          }
           "err_code": 2,
           "status": "Project already exist",
            "data": [
  2
              "project_id": 11,
              "project_name": "orm"
```

1.6. Update Project by User

This method is used to update project information.

- Request

Method	URL
PUT	{host}:{port}/{apikey}/project/{project_id}/user/{user_id}
Example: 192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/pser/2	
	{ "project_name": "NewORM" }

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{project_id}	Integer
	{user_id}	Integer

```
Status Response

{
    "err_code": 0,
    "data": {
        "project_id": 11,
        "project_name": "NewORM",
        "project_create_date": "2017-03-30 12:35:42",
        "project_update_date": "2017-03-30 12:40:38",
        "project_is_share": 0,
```

```
"user_id": 2,
           "group_id": "null"
          }
         }
          "err_code": 2,
2
          "err_msg": "Project id is not found"
         {
          "err_code": 1,
1
          "err_msg": "Access denied. Cannot access this project"
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
         {
          "err_code": 4,
4
          "err_msg": "IP Address is not registered
```

1.7. Update Project Share to Group

This method is used to update project sharing information.

- Request

Method	URL
PUT	<pre>{host}:{port}/{apikey}/project/{project_id}/share/{group_id} Example : 192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/project/11, hare/2</pre>
	{ "project_is_share": "true" }

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
	{port}	Integer
URL_PARAMS	{apikey}	String
	{project_id}	Integer
	{group_id}	Integer

Status	Response
0	{ "err_code": 0, "status": " Project has been shared to group"

	}
500	{ "err_code": 500, "err_msg": "Wrong apikey" }
4	{ "err_code": 4, "err_msg": "IP Address is not registered }
2	{ "err_code": 2, "err_msg": "Access denied for this project" }

1.8. Delete Project

This method is used to delete project.

- Request

Method	URL	
DELETE	{host}:{port}/{apikey}/project/{project_id}/user/{user_id}	
	Example : 192.168.1.230:7003/90867b984d2a5038ee21a190996b900b/project/1 /user/2	

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{project_id}	Integer
	{group_id}	Integer

Status	Response
0	{ "err_code": 0, "status": " Project has been shared to group" }
2	{ "err_code": 2, "err_msg": "Access denied. Cannot access this project" }
500	{ "err_code": 500, "err_msg": "Wrong apikey" }
4	{

```
"err_code": 4,
    "err_msg": "IP Address is not registered
}
```

2. Inventory

2.1. Get Inventory

This method is used to get inventory information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/project/{project_id}/inventory/{inventory_id} Example:
	192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/project/11/
	nventory/23

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
	{port}	Integer
URL_PARAMS	{apikey}	String
	{project_id}	Integer
	{inventory_id}	Integer

```
Status
                                       Response
           "err_code": 0,
           "data": [
              "project_id": "11",
              "project_name": "newORM",
              "inventory_id": 23,
             "inventory_name": "encaes256",
              "inventory_path":
          "/usr/share/vgrid/inventory/anang_andrianto/csd/",
             "inventory_type": "csd",
  0
              "inventory_create_date": "2017-03-30 13:48:53",
              "inventory_update_date": "null",
              "inventory_package": {
              "HGrid247": {
                "HfsSource": {
                "ID": "1490068619071",
                "hfsName": "_user_yava_purchases_in",
                "label": "_user_yava_purchases_in",
                "type": "HFSSOURCE",
                "schemeClass": "TextLine",
                 "outputFormat": "hgrid247-####",
                "enabled": "true",
```

```
"maxPrevNode": "1",
"posx": "115",
"posy": "200",
"inputdir": "/user/yava/purchases.in"
},
"Each": [
  "ID": "1490068619080",
 "name": "each 1490068619080",
  "type": "EACH",
  "pipeName": "each_1490068619080",
  "maxPrevNode": "1",
  "flowName": "1490068619080",
 "enabled": "true",
  "posx": "230",
  "posy": "200",
 "label": "inputparser 0",
  "inFields": "line",
 "inFieldsType": "String",
  "outFields": "in0.date,in0.cc,in0.total",
 "outFieldsType": "String,String,Double"
},
 "ID": "1490068619110",
 "name": "each_1490068619110",
  "type": "EACH",
  "pipeName": "each_1490068619110",
  "maxPrevNode": "1",
  "flowName": "1490068619110",
 "enabled": "true",
  "posx": "345",
 "posy": "200",
  "label": "mapping 1",
 "inFields": "in0.date,in0.cc,in0.total",
 "inFieldsType": "String,String,Double",
 "outFields": "out0.date,out0.Func0,out0.total",
 "outFieldsType": "String,String,Double"
},
  "ID": "1490068619126",
 "name": "each_1490068619126",
 "type": "EACH",
  "pipeName": "each 1490068619126",
  "maxPrevNode": "1",
 "flowName": "1490068619126",
  "enabled": "true",
  "posx": "460",
  "posy": "200",
  "label": "outputjoiner_2",
 "inFields": "out0.date,out0.Func0,out0.total",
  "inFieldsType": "String,String,Double",
```

```
"outFields": "outputfield",
  "outFieldsType": "String"
}
],
"Transform": [
  "parentID": "1490068619080",
  "ID": "1490068619088",
  "label": "transform 0",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "cascading.solusi247.transform.string.Substring",
  "input": "line",
  "output": "in0.date",
  "parameter": "0,10"
 },
  "parentID": "1490068619080",
  "ID": "1490068619096",
  "label": "transform_1",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "cascading.solusi247.transform.string.Substring",
  "input": "line",
  "output": "in0.cc",
  "parameter": "11,16"
  "parentID": "1490068619080",
  "ID": "1490068619103",
  "label": "transform_2",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "cascading.solusi247.transform.string.Substring",
  "input": "line",
  "output": "in0.total",
  "parameter": "29,7"
 },
  "parentID": "1490068619110",
  "ID": "1490068619118",
  "label": "transform_3",
```

```
"enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "EncryptAes256",
  "input": "in0.cc",
  "output": "out0.Func0",
  "parameter": "myPassword123"
},
  "parentID": "1490068619126",
  "ID": "1490068619133",
  "label": "transform_4",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "FieldJoiner",
  "input": "out0.date,out0.Func0,out0.total",
  "output": "outputfield",
  "parameter": "|"
}
],
"Hfs2Pipe": {
"fromID": "1490068619071",
 "toID": "1490068619080"
},
"Identity": [
  "parentID": "1490068619110",
  "fromField": "in0.date",
  "toField": "out0.date"
},
  "parentID": "1490068619110",
  "fromField": "in0.total",
  "toField": "out0.total"
}
],
"Pipe2Pipe": [
  "fromID": "1490068619080",
  "toID": "1490068619110",
  "color": "black"
},
  "fromID": "1490068619110",
  "toID": "1490068619126",
  "color": "black"
```

```
}
              ],
              "HfsSink": {
               "ID": "1490068619141",
               "hfsName": "_user_yava_purchases_encrypted",
               "label": "_user_yava_purchases_encrypted",
               "type": "HFSSINK",
               "enabled": "true",
               "posx": "575",
               "posy": "200",
               "outputFormat": "hgrid247-####",
               "fileType": "Hfs",
               "outputdir": "/user/yava/purchases.encrypted",
               "incomingFields": "outputfield"
              "Pipe2Hfs": {
               "fromID": "1490068619126",
               "toID": "1490068619141"
          "err_code": 5,
5
          "err_msg": "Project ID must be numeric"
         {
          "err_code": 3,
3
          "err_msg": "Project Id not found"
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
         {
          "err_code": 4,
4
          "err_msg": "IP Address is not registered
          "err_code": 2,
2
          "err_msg": "Project is not share for this user"
```

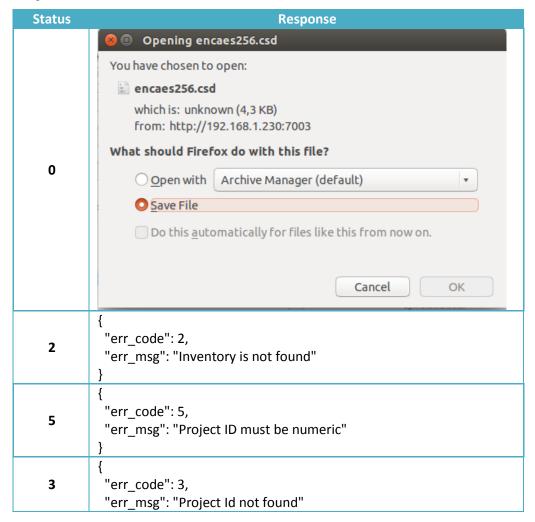
2.2. Download Inventory

This method is used to download inventory.

- Request

Method	URL
GET	{host}:{port}/{apikey}/download_inventory/{inventory_id}/project/{proect_id}
	Example: 192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/download_nventory/23/project/11

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
	{port}	Integer
URL_PARAMS	{apikey}	String
	{inventory_id}	Integer
	{project_id}	Integer



2.3. Add Inventory

This method is used to add new inventory to a project.

- Request

```
Method
 POST
          {host}:{port}/{apikey}/project/{project_id}/inventory
          Example:
          192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/project/11/
          nventory
            "inventory name": "encaes256",
            "inventory_type": "csd",
            "inventory_package":{
            "HGrid247": {
             "HfsSource": {
              "ID": "1490068619071",
              "hfsName": "_user_yava_purchases_in",
              "label": "_user_yava_purchases_in",
              "type": "HFSSOURCE",
              "schemeClass": "TextLine",
              "outputFormat": "hgrid247-####",
              "enabled": "true",
              "maxPrevNode": "1",
              "posx": "115",
              "posy": "200",
              "inputdir": "/user/yava/purchases.in"
             "Each": [
               "ID": "1490068619080",
               "name": "each_1490068619080",
               "type": "EACH",
               "pipeName": "each_1490068619080",
               "maxPrevNode": "1",
```

```
"flowName": "1490068619080",
  "enabled": "true",
  "posx": "230",
 "posy": "200",
 "label": "inputparser_0",
  "inFields": "line",
 "inFieldsType": "String",
  "outFields": "in0.date,in0.cc,in0.total",
 "outFieldsType": "String,String,Double"
 "ID": "1490068619110",
  "name": "each 1490068619110",
  "type": "EACH",
  "pipeName": "each_1490068619110",
  "maxPrevNode": "1",
 "flowName": "1490068619110",
  "enabled": "true",
 "posx": "345",
 "posy": "200",
  "label": "mapping_1",
 "inFields": "in0.date,in0.cc,in0.total",
  "inFieldsType": "String,String,Double",
 "outFields": "out0.date,out0.Func0,out0.total",
 "outFieldsType": "String,String,Double"
},
 "ID": "1490068619126",
 "name": "each_1490068619126",
 "type": "EACH",
  "pipeName": "each_1490068619126",
  "maxPrevNode": "1",
  "flowName": "1490068619126",
  "enabled": "true",
 "posx": "460",
  "posy": "200",
 "label": "outputjoiner_2",
  "inFields": "out0.date,out0.Func0,out0.total",
  "inFieldsType": "String,String,Double",
 "outFields": "outputfield",
 "outFieldsType": "String"
"Transform": [
  "parentID": "1490068619080",
  "ID": "1490068619088",
  "label": "transform_0",
  "enabled": "true",
 "posx": "270",
 "posy": "130",
```

```
"inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.date",
 "parameter": "0,10"
},
 "parentID": "1490068619080",
 "ID": "1490068619096",
 "label": "transform_1",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.cc",
 "parameter": "11,16"
},
 "parentID": "1490068619080",
 "ID": "1490068619103",
 "label": "transform 2",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.total",
 "parameter": "29,7"
},
 "parentID": "1490068619110",
 "ID": "1490068619118",
 "label": "transform_3",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "EncryptAes256",
 "input": "in0.cc",
 "output": "out0.Func0",
 "parameter": "myPassword123"
},
 "parentID": "1490068619126",
```

```
"ID": "1490068619133",
  "label": "transform_4",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "FieldJoiner",
  "input": "out0.date,out0.Func0,out0.total",
  "output": "outputfield",
  "parameter": "|"
"Hfs2Pipe": {
"fromID": "1490068619071",
 "toID": "1490068619080"
"Identity": [
  "parentID": "1490068619110",
  "fromField": "in0.date",
  "toField": "out0.date"
  "parentID": "1490068619110",
 "fromField": "in0.total",
  "toField": "out0.total"
],
"Pipe2Pipe": [
  "fromID": "1490068619080",
  "toID": "1490068619110",
  "color": "black"
  "fromID": "1490068619110",
  "toID": "1490068619126",
  "color": "black"
}
],
"HfsSink": {
 "ID": "1490068619141",
 "hfsName": "_user_yava_purchases_encrypted",
 "label": "_user_yava_purchases_encrypted",
 "type": "HFSSINK",
 "enabled": "true",
 "posx": "575",
 "posy": "200",
 "outputFormat": "hgrid247-####",
 "fileType": "Hfs",
```

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
URL_PARAMS	{port}	Integer
UKL_PAKAIVIS	{apikey}	String
	{project_id}	Integer

```
Status
                                        Response
           "err code": 0,
           "data": [
              "project_id": "11",
              "project name": "newORM",
              "inventory id": 21,
              "inventory_name": "encaes256",
              "inventory_path":
          "/usr/share/vgrid/inventory/anang_andrianto/csd/",
              "inventory_type": "csd",
              "inventory_create_date": "2017-03-30 13:45:30",
              "inventory_update_date": "null",
              "inventory_package": {
  0
               "HGrid247": {
                "HfsSource": {
                 "ID": "1490068619071",
                 "hfsName": "_user_yava_purchases_in",
                 "label": "_user_yava_purchases_in",
                 "type": "HFSSOURCE",
                 "schemeClass": "TextLine",
                 "outputFormat": "hgrid247-####",
                 "enabled": "true",
                 "maxPrevNode": "1",
                 "posx": "115",
                 "posy": "200",
                 "inputdir": "/user/yava/purchases.in"
                },
                "Each": [
```

```
"ID": "1490068619080",
  "name": "each_1490068619080",
  "type": "EACH",
  "pipeName": "each_1490068619080",
  "maxPrevNode": "1",
  "flowName": "1490068619080",
  "enabled": "true",
  "posx": "230",
  "posy": "200",
  "label": "inputparser_0",
  "inFields": "line",
  "inFieldsType": "String",
  "outFields": "in0.date,in0.cc,in0.total",
  "outFieldsType": "String,String,Double"
},
  "ID": "1490068619110",
  "name": "each_1490068619110",
  "type": "EACH",
  "pipeName": "each_1490068619110",
  "maxPrevNode": "1",
  "flowName": "1490068619110",
  "enabled": "true",
  "posx": "345",
  "posy": "200",
  "label": "mapping_1",
  "inFields": "in0.date,in0.cc,in0.total",
  "inFieldsType": "String,String,Double",
  "outFields": "out0.date,out0.Func0,out0.total",
  "outFieldsType": "String,String,Double"
},
  "ID": "1490068619126",
  "name": "each_1490068619126",
  "type": "EACH",
  "pipeName": "each_1490068619126",
  "maxPrevNode": "1",
  "flowName": "1490068619126",
  "enabled": "true",
  "posx": "460",
  "posy": "200",
  "label": "outputjoiner 2",
  "inFields": "out0.date,out0.Func0,out0.total",
  "inFieldsType": "String,String,Double",
  "outFields": "outputfield",
  "outFieldsType": "String"
}
],
"Transform": [
```

```
"parentID": "1490068619080",
 "ID": "1490068619088",
 "label": "transform_0",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.date",
 "parameter": "0,10"
},
 "parentID": "1490068619080",
 "ID": "1490068619096",
 "label": "transform 1",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.cc",
 "parameter": "11,16"
},
 "parentID": "1490068619080",
 "ID": "1490068619103",
 "label": "transform_2",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "cascading.solusi247.transform.string.Substring",
 "input": "line",
 "output": "in0.total",
 "parameter": "29,7"
},
 "parentID": "1490068619110",
 "ID": "1490068619118",
 "label": "transform 3",
 "enabled": "true",
 "posx": "270",
 "posy": "130",
 "inputCount": "2",
 "outputCount": "2",
 "name": "EncryptAes256",
```

```
"input": "in0.cc",
  "output": "out0.Func0",
  "parameter": "myPassword123"
  "parentID": "1490068619126",
  "ID": "1490068619133",
  "label": "transform 4",
  "enabled": "true",
  "posx": "270",
  "posy": "130",
  "inputCount": "2",
  "outputCount": "2",
  "name": "FieldJoiner",
  "input": "out0.date,out0.Func0,out0.total",
  "output": "outputfield",
  "parameter": "|"
}
],
"Hfs2Pipe": {
"fromID": "1490068619071",
"toID": "1490068619080"
"Identity": [
  "parentID": "1490068619110",
  "fromField": "in0.date",
  "toField": "out0.date"
  "parentID": "1490068619110",
  "fromField": "in0.total",
  "toField": "out0.total"
}
],
"Pipe2Pipe": [
  "fromID": "1490068619080",
  "toID": "1490068619110",
  "color": "black"
},
  "fromID": "1490068619110",
  "toID": "1490068619126",
  "color": "black"
}
],
"HfsSink": {
 "ID": "1490068619141",
"hfsName": "_user_yava_purchases_encrypted",
"label": "_user_yava_purchases_encrypted",
```

```
"type": "HFSSINK",
               "enabled": "true",
               "posx": "575",
               "posy": "200",
               "outputFormat": "hgrid247-####",
               "fileType": "Hfs",
               "outputdir": "/user/yava/purchases.encrypted",
               "incomingFields": "outputfield"
              },
              "Pipe2Hfs": {
               "fromID": "1490068619126",
               "toID": "1490068619141"
             }
            }
           }
          ]
          "err_code": 2,
2
          "err_msg": "Project is not share for this user"
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
         {
          "err code": 4,
4
          "err_msg": "IP Address is not registered
```

2.4. Delete Inventory

This method is used to delete inventory from a project.

- Request

Method	URL
DELETE	{host}:{port}/{apikey}/project/{project_id}/inventory/{inventory_id}
	Example: 192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/project/11/nventory/23

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
LIDI DADAMS	{port}	Integer
URL_PARAMS	{apikey}	String
	{inventory_ id}	Integer

Status	Response			
0	{ "err_code": 0, "status": "Inventory has been deleted" }			
2	{ "err_code": 2, "err_msg": "Access denied. Cannot access this project" }			
500	{ "err_code": 500, "err_msg": "Wrong apikey" }			
4	{ "err_code": 4, "err_msg": "IP Address is not registered }			

D. Generate Jar

Generate Jar is used to generate, download, and view a jar on VGrid.

1. Generate Jar

This method is used to generate jar.

- Request

Method	URL
GET	{host}:{port}/{apikey}/{apikey}/generate_jar/{project_id}/{inventory_id
	Example: 192.168.1.230:7004/90867b984d2a5038ee21a190996b900b/generate_ar/7/2

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{project_ id}	Integer
	{inventory_ id}	Integer

```
Response
Status
           "err_code": 0,
           "data": [
            {
              "compile_id": 42,
              "compile_name": "newORM",
              "compile_path": "/user/yava/vgrid/jar/newORM/",
  0
              "compile_type": "jar",
              "compile_create_date": "2017-03-30 14:24:58",
              "compile_update_date": "null",
             "compile_project_id": 11,
              "compile inventory id": 22
           ]
          }
           "err_code": 1,
  1
           "err_msg": "Project id is not found"
          {
           "err_code": 26,
 26
           "err_msg": "Project or inventory is not found"
 28
```

	"err_code": 28, "err_msg": "Inventory id must be numeric"
29	{ "err_code": 29, "err_msg": "Project id must be numeric" }
500	{ "err_code": 500, "err_msg": "Wrong apikey" }
4	{ "err_code": 4, "err_msg": "IP Address is not registered }

2. Download Jar

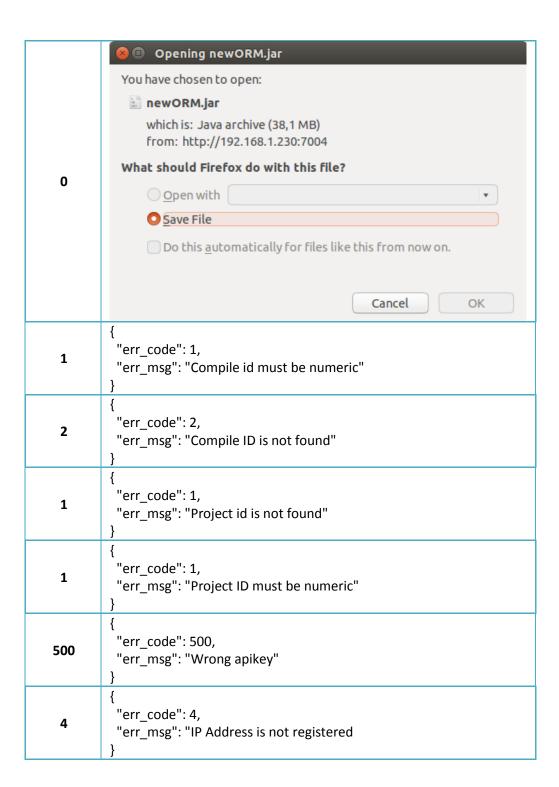
This method is used to download jar.

- Request

Method	URL
GET	{host}:{port}/{apikey}/download_inventory/{inventory_id}/project/{pro
	ect_id}
	Example :
	192.168.1.230:7003/bc4f313607048c0060fcd74ec77edbd0/download_
	nventory/17/project/10

Туре	Parameter Value	
HEAD	auth_key	String
	{host}	IP address
LIDL DADAMS	{port}	Integer
URL_PARAMS	{apikey}	String
	{inventory_ id}	Integer

Status	Response	



3. View Jar

This method is used to view jar.

- Request

Method	URL
GET	{host}:{port}/{apikey}/view_jar/{compile_id}/project/{project_id}
	Example: 192.168.1.230:7004/bc4f313607048c0060fcd74ec77edbd0/view_jar/42

n	roi	Ω	rt.	11	1
		c	LL.	, т	. т

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String
	{compile_ id}	Integer
	{project_ id}	Integer

```
Status
                                       Response
           "err_code": 0,
           "data": {
            "project_id": 11,
            "project_name": "newORM",
            "compile_id": 42,
            "compile_name": "newORM",
  0
            "compile_path": "/user/yava/vgrid/jar/newORM/",
            "compile_type": "jar",
            "compile create date": "2017-03-30 14:24:58",
            "compile_update_date": "null",
            "compile_inventory_id": 22
           }
           "err_code": 1,
  1
           "err_msg": "Compile id must be numeric"
           "err_code": 2,
  2
           "err_msg": "Compile ID is not found"
          {
           "err_code": 1,
  1
           "err_msg": "Project id is not found"
           "err_code": 1,
  1
           "err_msg": "Project ID must be numeric"
           "err_code": 500,
 500
           "err_msg": "Wrong apikey"
           "err_code": 4,
  4
           "err_msg": "IP Address is not registered
```

}

E. Oozie

Oozie is used to manage Oozie Job on VGrid.

1. Submit Job

This method is used to submit Oozie Job.

- Request

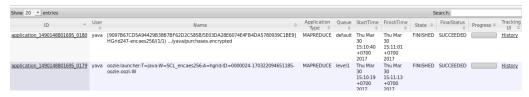
Method	URL
POST	{host}:{port}/{apikey}/submit_job
	Example: http://192.168.1.230:7005/bc4f313607048c0060fcd74ec77edbd0/subrt_job { "projectId": "11", "jarName": "/user/yava/vgrid/jar/newORM//newORM.jar", "jobName": "SCL_encaes256", "className": "newORM.encaes256"
	}

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

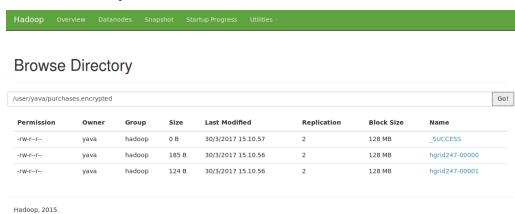
- Oozie Web Console



- Cluster Hadoop Application



- Namenode Hadoop Information



2. Get Job ID

This method is used to get Oozie Job ID.

- Request

Method	URL
GET	{host}:{port}/{apikey}/get_job_id
	Example: http://192.168.1.230:7005/bc4f313607048c0060fcd74ec77edbd0/get_ ob id

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

Chabin	D	
Status	Response	

3. Get Job Info

This method is used to get Oozie Job Information.

- Request

Method	URL
GET	{host}:{port}/{apikey}/get_job_info/{oozie_job_ld}
	Example :
	http://192.168.1.230:7005/bc4f313607048c0060fcd74ec77edbd0/get_
	ob_info/0000024-170322094651185-oozie-oozi-W

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
LIDI DADAME	{port}	Integer
URL_PARAMS	{apikey}	String
	{oozie_job_id}	Integer

```
Status
                                     Response
           "err_code": 0,
           "data": {
           "appPath":
         "hdfs://192.168.1.230:8020/user/yava/jobfile/workflow/newORM/wor
         flow.xml",
           "acl": null,
  0
           "status": "SUCCEEDED",
           "createdTime": "Thu, 30 Mar 2017 08:10:12 GMT",
           "conf": "<configuration>\n <property>\n
         <name>user.name</name>\r\n <value>yava</value>\r\n
         </property>\r\n <property>\r\n
         <name>oozie.use.system.libpath</name>\r\n <value>true</value>\r\
         </property>\r\n <property>\r\n <name>oozie.libpath</name>\r\n
```

```
<value>hdfs://192.168.1.230:8020/user/yava/oozie/hgrid/lib</value>\
n </property>\r\n <property>\r\n
<name>mapreduce.job.user.name</name>\r\n
<value>yava</value>\r\n </property>\r\n <property>\r\n
<name>queueName</name>\r\n <value>level1</value>\r\n
</property>\r\n r\n <name>nameNode</name>\r\n
<value>hdfs://192.168.1.230:8020\r\n preperty>\r\n
<value>192.168.1.231:8050\r\n 
<value>hdfs://192.168.1.230:8020/user/yava/jobfile/workflow/newOR
M/workflow.xml</value>\r\n </property>\r\n</configuration>",
  "lastModTime": "Thu, 30 Mar 2017 08:11:16 GMT",
  "run": 0,
  "endTime": "Thu, 30 Mar 2017 08:11:16 GMT",
  "externalId": null,
  "appName": "SCL encaes256",
  "id": "0000024-170322094651185-oozie-oozi-W",
  "startTime": "Thu, 30 Mar 2017 08:10:12 GMT",
  "parentId": null,
  "toString": "Workflow id[0000024-170322094651185-oozie-oozi-W]
status[SUCCEEDED]",
  "group": null,
  "consoleUrl":
"http://yava231.solusi247.com:11000/oozie?job=0000024-
170322094651185-oozie-oozi-W",
  "user": "yava",
  "actions": [
    "errorMessage": null,
   "status": "OK",
   "stats": null,
    "data": null,
    "transition": "hgrid",
   "externalStatus": "OK",
    "cred": "null",
   "conf": "",
    "type": ":START:",
    "endTime": "Thu, 30 Mar 2017 08:10:12 GMT",
   "externalId": "-",
   "id": "0000024-170322094651185-oozie-oozi-W@:start:",
   "startTime": "Thu, 30 Mar 2017 08:10:12 GMT",
    "userRetryCount": 0,
    "externalChildIDs": null,
   "name": ":start:",
    "errorCode": null,
    "trackerUri": "-",
    "retries": 0,
    "userRetryInterval": 10,
   "toString": "Action name[:start:] status[OK]",
    "consoleUrl": "-",
```

```
"userRetryMax": 0
   },
    "errorMessage": null,
    "status": "OK",
    "stats": null,
    "data": null,
    "transition": "end",
    "externalStatus": "SUCCEEDED",
    "cred": "null",
    "conf": "<java xmlns=\"uri:oozie:workflow:0.5\">\r\n <job-
tracker>192.168.1.231:8050</job-tracker>\r\n <name-
node>hdfs://192.168.1.230:8020</name-node>\r\n
<configuration>\r\n <property>\r\n
<name>mapred.job.queue.name</name>\r\n
<value>level1</value>\r\n property>\r\n </configuration>\r\n
<main-class>newORM.encaes256</main-class>\r\n
<file>hdfs://192.168.1.230:8020/user/yava/vgrid/jar/newORM/newOR
M.jar</file>\r\n <capture-output />\r\n</java>",
    "type": "java",
    "endTime": "Thu, 30 Mar 2017 08:11:16 GMT",
    "externalId": "job 1490148801695 0179",
    "id": "0000024-170322094651185-oozie-oozi-W@hgrid",
    "startTime": "Thu, 30 Mar 2017 08:10:12 GMT",
    "userRetryCount": 0,
    "externalChildIDs": null,
    "name": "hgrid",
    "errorCode": null,
    "trackerUri": "192.168.1.231:8050",
    "retries": 0,
    "userRetryInterval": 10,
    "toString": "Action name[hgrid] status[OK]",
    "consoleUrl":
"http://cassandra04.solusi247.com:8088/proxy/application 149014880
1695 0179/",
    "userRetryMax": 0
   },
    "errorMessage": null,
    "status": "OK",
    "stats": null,
    "data": null,
    "transition": null,
    "externalStatus": "OK",
    "cred": "null",
    "conf": "",
    "type": ":END:",
    "endTime": "Thu, 30 Mar 2017 08:11:16 GMT",
    "externalId": "-",
    "id": "0000024-170322094651185-oozie-oozi-W@end",
    "startTime": "Thu, 30 Mar 2017 08:11:16 GMT",
```

```
"userRetryCount": 0,
              "externalChildIDs": null,
             "name": "end",
             "errorCode": null,
              "trackerUri": "-",
              "retries": 0,
              "userRetryInterval": 10,
             "toString": "Action name[end] status[OK]",
             "consoleUrl": "-",
              "userRetryMax": 0
           ]
          }
          "err_code": 7,
 7
          "err_msg": "Job Id is not found"
         {
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
          "err_code": 4,
 4
          "err_msg": "IP Address is not registered
```

4. Get Job History

This method is used to get Oozie Job History.

- Request

Method	URL
GET	{host}:{port}/{apikey}/get_job_history/project/{project_id}
	Example:
	http://192.168.1.230:7005/bc4f313607048c0060fcd74ec77edbd0/get
	_job_history/project/11

Туре	Parameter	Value
HEAD	auth_key	String
	{host}	IP address
LIDI DADAMS	{port}	Integer
URL_PARAMS	{apikey}	String
	{project_id}	Integer

Status	Response	
0	{	

```
"err_code": 0,
          "data": [
            "job_id": "0000024-170322094651185-oozie-oozi-W",
            "job_name": "SCL_encaes256",
            "job_status": "RUNNING",
            "job_create_date": "2017-03-30 15:10:12",
            "job_update_date": "2017-03-30 15:10:12",
            "job_workflow": "<workflow-app xmlns=\"uri:oozie:workflow:0.5\"
         name = \"SCL_encaes 256 \">\  \  < start to = \"hgrid \"/>\  \  < action
         name=\"hgrid\">\n
                                <java>\n
                                              <job-tracker>${jobTracker}</job
         tracker>\n
                         <name-node>${nameNode}</name-node>\n
         <configurat",
            "project_id": 11,
            "user_id": 2
           }
         ]
          "err_code": 500,
500
          "err_msg": "Wrong apikey"
          "err_code": 4,
4
          "err_msg": "IP Address is not registered
```

5. Generate XML

This method is used to generate XML.

- Request

Method	URL
GET	{host}:{port}/{apikey}/ generate_xml
	Example: http://192.168.1.230:7005/bc4f313607048c0060fcd74ec77edbd0/generate xml

Туре	Parameter	Value
HEAD	auth_key	String
URL_PARAMS	{host}	IP address
	{port}	Integer
	{apikey}	String

Status	Response
0	{ "err_code": 0,

```
"data": {
         "xml": "<?xml version=\"1.0\"?>\n<configuration>\n <property>\n
       <name>user.name</name>\n
                                    <value>yava</value>\n
       <name>nameNode</name>\n
       <value>hdfs://192.168.1.230:8020</value>\n 
                      <name>jobTracker</name>\n
       cproperty>\n
       <value>192.168.1.231:8050\n property>\n
                                      <value>level1</value>\n
       <name>queueName</name>\n
       <name>oozie.use.system.libpath</name>\n
                                                <value>true</value>\r
       </property>\n <property>\n
                                    <name>oozie.libpath</name>\n
       <value>${nameNode}/user/yava/oozie/hgrid/lib</value>\n
       <name>oozie.wf.application.path</name>\n
       <value>${nameNode}/user/yava/jobfile/workflow/newORM/workflow.
       ml</value>\n </property>\n</configuration>",
         "workflow": "<workflow-app xmlns=\"uri:oozie:workflow:0.5\"
       name=\"SCL encaes256\">\n <start to=\"hgrid\"/>\n <action
       name=\"hgrid\">\n
                           <java>\n
                                        <job-tracker>${jobTracker}</job
       tracker>\n
                      <name-node>${nameNode}</name-node>\n
       <configuration>\n
                              property>\n
       <name>mapred.job.queue.name</name>\n
       <value>level1</value>\n
                                    </property>\n
       </configuration>\n
                             <main-class>newORM.encaes256</main-
       class>\n
       <file>${nameNode}/user/yava/vgrid/jar/newORM/newORM.jar</file>\
       <capture-output/>\n
                            </java>\n
                                        <ok to=\"end\"/>\n
                                                            <error
       to=\"fail\"/>\n </action>\n <kill name=\"fail\">\n
       <message>Workflow failed, error
       message[${wf:errorMessage(wf:lastErrorNode())}]</message>\n
       </kill>\n <end name=\"end\"/>\n</workflow-app>"
        }
       }
        "err_code": 500,
500
        "err_msg": "Wrong apikey"
       }
        "err_code": 4,
4
        "err msg": "IP Address is not registered
```