



# **CERT+ Automation Workflows API Guide**

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# Preface

## Revision History

Revision	Description	Date
1.0	Initial release of document for Release 2022.1.0	June 2022
2.0	Updated release of document for release 2022.1.0 FP2 Beta	November 2022

## About this Guide

This guide describes AppViewX's predefined Out of the Box (OOB) workflows for CERT+ that will assist you in self-servicing workflows for the certificate expiry notification, certificate enrollment, and certificate renewal. These workflows automate tasks like the intimation of expiry of certificates, generating reports of expiry of orphan certificates, updating certificate attributes, enrolling new certificates based on different input methods (manual, policy based, CSR), renewing and regenerating certificates, pushing certificates to devices, and incident automation with ServiceNow and JIRA.

This guide also talks about the OOB tasks available in the Workflow Studio. These tasks can be used to design workflows for certificate expiry notification, enrolling certificates, and renewing certificates as per your requirements.

## Audience

This guide is intended for:

- PKI admins
- AppOwners
- SecOps engineers
- NetOps engineers

## Text Conventions

The following text conventions are used in this document:

Convention	Description
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Description
codeblock	Indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Chapter 1: Before you Begin

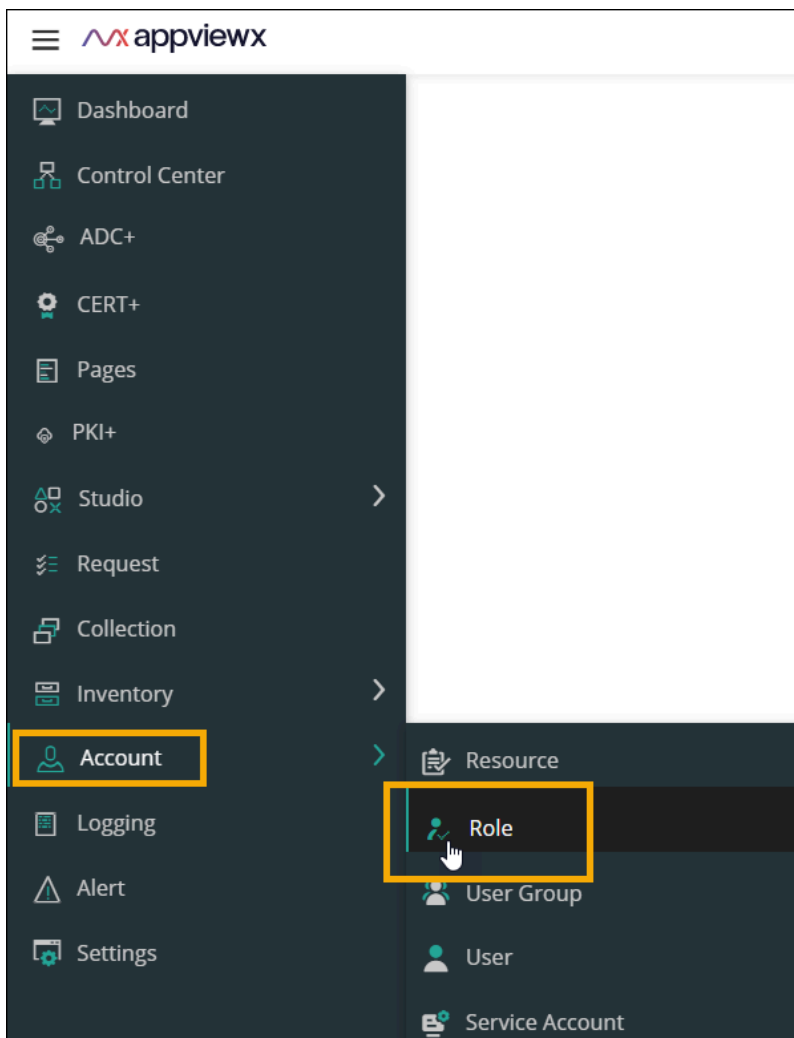
Before attempting to submit these workflow requests, ensure that:

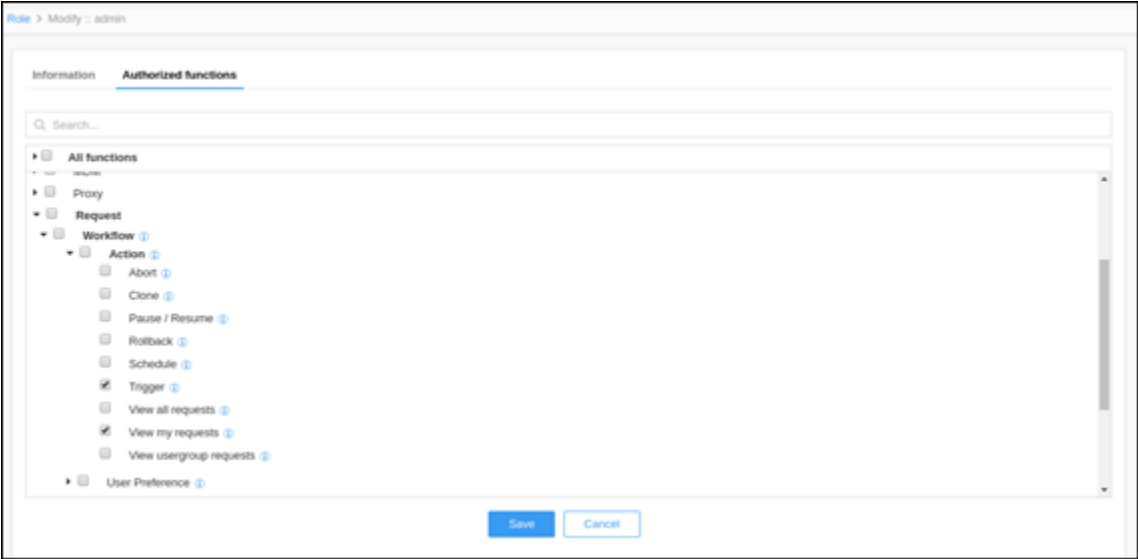
- The workflow is enabled.



**Note:** For more information on how to enable a workflow, refer to the Visual Workflow User Guide.

- The API user has the necessary RBAC permissions to trigger the workflow. You can check this under **Account > Role > Authorized functions**.





# Chapter 2: Login to retrieve active SessionId

- [Overview](#)
- [Request Structure](#)
- [Response Structure](#)
- [Response](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API retrieves the sessionId. This sessionId retrieved can be used for another api that ensures a valid session.

## Request Structure

URL: /acctmgmt-perform-login

Type: POST

Param Type	Name	Description	Field Type	Constraints
Header	username	AppViewX login username	String	NA
Header	password	AppViewX login password	String	NA
Header	Content-Type	Specifies the nature of the data in the payload	String	The value of the param should be 'application/json'
Query	gwkey	Tenant Key. Needed only in the case of multi-tenant installations.	String	NA
Query	gwsouce	Source from which the request is triggered (Eg: web, external)	String	NA
Body	payload	Contains an empty payload	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request	response
message	Success message or failure description in case of error	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response	NA

## Response

Name	Description	Field Type
status	Status of the request	String
appStatusCode	appStatusCode	String
statusDescription	Description of the status	String
sessionId	SessionId to be retrieved	String
availableLoginAttemptCount	Count of login attempts	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible remediation
200 OK	NA	Login successful	
400 Bad Request	NA	Username or password cannot be null or empty	Check and ensure if a non-null/non-empty value is given in the header field for username or password

HTTP Status Code	appStatusCode	Message	Possible remediation
401 Unauthorized	NA	Login failed. Invalid credentials.	Check and ensure if the username and password provided are valid and correct

## Sample Request/Response

This api retrieves the sessionId. This sessionId retrieved can be used for another api that ensures a valid session.

### Use Case

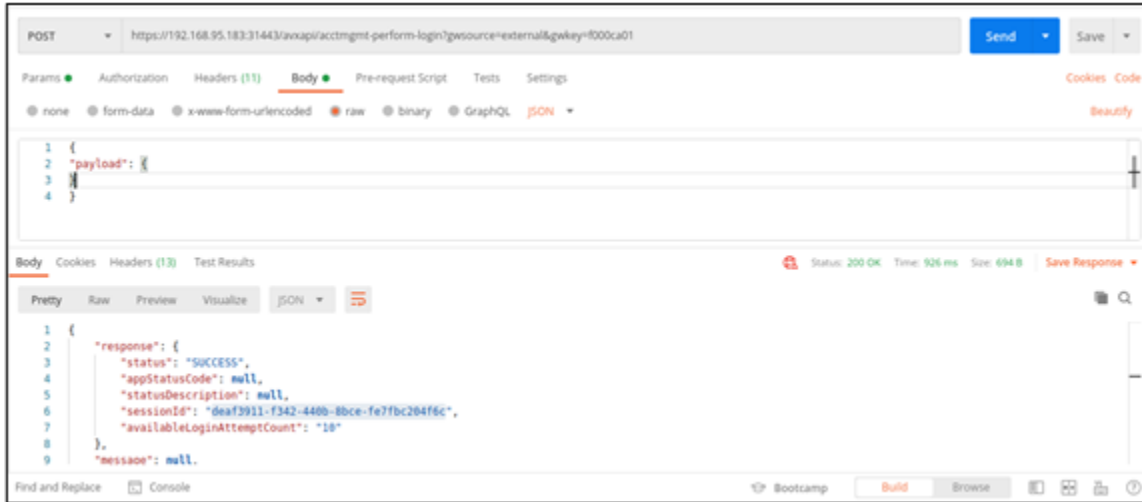
Submit a request for the sessionId retrieval.

### Sample Request

```
{
  "payload": {
  }
}
```

### Sample Response

```
{
  "response": {
    "status": "SUCCESS",
    "appStatusCode": null,
    "statusDescription": null,
    "sessionId": "dea911-f342-440b-8bce-fe7fbc204g6c",
    "availableLoginAttemptCount": "10"
  },
  "message": null,
  "appStatusCode": null,
  "tags": null,
  "headers": null
}
```



# Chapter 3: Enroll Certificate and Download

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to create and download certificates based on the certificate group.

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsouce	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of certificate authority.	String	NA
division	Yes	Division values for DigiCert.	String	Required only if DigiCert is selected as the CA.
cert_type	Yes	Cert Type values for DigiCert and Entrust.	String	Required only if DigiCert is selected as the CA.
description	No	Description of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the	String	NA

Name	Mandatory	Description	Field Type	Constraints
		certificate. <b>Possible Values:</b> DNS, IP Address		
dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
organization	No	Name of the organization requesting the certificate.	String	Required only if AppViewX, EJBCA, Microsoft Enterprise is selected as the CA.
digicert_entrust_organization	Yes	Name of the organization.	String	Required only if DigiCert, Entrust is selected as the CA.
organization_unit	No	Organization unit requesting the certificate.	String	NA
locality	No	Locality in which the organization is situated.	String	NA
state	No	State in which the organization is located.	String	NA

Name	Mandatory	Description	Field Type	Constraints
country	No	Country in which the organization is located.	String	Required only if AppViewx, EJBCA, Entrust, Digicert, Microsoft Enterprise is selected as the CA.
entrust_country	Yes	Country in which the organization is located.	String	Required only if Entrust is selected as the CA.
digicert_postal_code	No	Postal code of the organization.	String	Required only if DigiCert is selected as the CA.
mail_address	No	Email address of the organization.	String	NA
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA
key_type	Yes	Key type for the certificate. <b>Possible values:</b> RSA, DSA, EC.	String	Required only when the input_method is selected as Manual or Policy Based.
bit_length	Yes	Bit length for the certificate. <b>Possible values:</b> 4096, 2048.	String	Required only when the input_method is selected as Manual or Policy Based.
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA

Name	Mandatory	Description	Field Type	Constraints
elliptic_curve	Yes	Elliptic curve value for the certificate.	String	Required only if key_type is selected as EC.
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_issuer_common_name	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
ejbca_certificate_profile_name	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
entrust_additional_emails	No	Additional email address(es).	String	Required only if Entrust is selected as CA.
microsoft_enterprise_template_name	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.
user_email	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The cert_attributes field will be passed only if the value is true.

Name	Mandatory	Description	Field Type	Constraints
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA

- [cert\\_attributes](#)

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attribute names.	String	NA
attribute_value	No	Attribute values.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String

Name	Description	Field Type
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK	NA	Success	NA
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	NA

# Sample Request/Response

## Sample Request

```
{
  "payload": {
    "header": {
      "workflowName": "Enroll Certificate and Download"
    },
    "data": {
      "input": {
        "requestData": [
          {
            "sequenceNo": 1,
            "scenario": "scenario",
            "fieldInfo": {
              "info": "",
              "cert_category": "Server,Client,Code Signing",
              "certificate_group": "<mandatory field>",
              "certificate_authority": "DigiCert,Entrust,Ejbca,AppViewX,Microsoft Enterprise",
              "ca_account": "<mandatory field>",
              "division": "<mandatory field>",
              "cert_type": "<mandatory field>",
              "description": "",
              "common_name": "<mandatory field>",
              "san": "DNS, IP Address",
              "dns_names": "",
              "ip_addresses": "",
              "organization": "",
              "digicert_entrust_organization": "<mandatory field>",
              "organization_unit": "",
              "organization_address": "",
              "locality": "",
              "state": "",
              "country": "",
              "entrust_country": "<mandatory field>",
              "digicert_postal_code": "",
              "mail_address": ""
            }
          }
        ]
      }
    }
  }
}
```

```

"validity_unit": "Days,Months,Years",
"validity_value": "<mandatory field>",
"key_type": "RSA,DSA,EC",
"bit_length": "<mandatory field>",
"hash_function": "<mandatory field>",
"elliptic_curve": "<mandatory field>",
"check_attribute": "true",
"certificates_attributes": [
  {
    "attributes": "",
    "value": ""
  }
],
"digicert_server_type": "<mandatory field>",
"ejbca_end_entity_profile_name": "<mandatory field>",
"ejbca_end_entity_user_name": "",
"ejbca_issuer_common_name": "<mandatory field>",
"ejbca_certificate_profile_name": "<mandatory field>",
"microsoft_enterprise_template_name": "<mandatory field>",
"entrust_additional_emails": "",
"user_email": "(~get_logged_user_email_id~)"
}
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```

{
  "response": {
    "workorderId": "0",

```

```
"requestType": "default",  
"requestId": "867",  
"workflowVersion": "master",  
"message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",  
"status": "In Progress",  
"statusCode": 0  
},  
"message": "Success",  
"appStatusCode": null,  
"tags": null,  
"headers": null  
}
```

# Chapter 4: Easy Certificate Provisioning

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to create an AppViewX certificate and push to a device available in the instance.

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsources	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
appviewx_common_name	Yes	Common name of the certificate. Fully qualified domain name (FQDN) of the server for which certificate is requested.	String	NA
appviewx_dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
device_type	Yes	Type of device to which the certificate will be pushed. <b>Possible Values:</b> ADC, Server.	String	NA
push_devices	Yes	Contains all push details.	Tabular	NA
device_vendor	Yes	Device vendor type based on selection of device type. <b>Possible Values:</b> F5, LinuxServer, Citrix.	String	NA
device	Yes	Device name for selected device_vendor.	String	NA
linux_actions	Yes	Linux action for the selected device_vendor. <b>Possible Values:</b> Default, Create KDB label (*.kdb), Certificate Overwrite (*.kdb).	String	Required only if the device vendor is selected as Linux Server.
selected_profiles	Yes	Profile name for device.	String	NA
apache_custom_push	Yes	Provision to opt for pushing the certificate to a custom location. <b>Possible Values:</b> Yes, No.	String	Required only if the device vendor

Name	Mandatory	Description	Field Type	Constraints
				is selected as Apache.
apache_certificate_location	Yes	Certificate path created by the user.	String	Required only if apache_custom_push is selected as Yes.
apache_key_location	Yes	Certificate Key path created by the user.	String	Required only if apache_custom_push is selected as Yes.
password	Yes	Password to access the KDB file.	String	Required only if linux_actions is selected as Default.
email_id	No	Email address of the organization. <b>Possible values:</b> Default value configured in the policy.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	response
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- Response

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.

HTTP Status Code	appStatusCode	Message	Possible Remediation
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  "payload": {
    "header": {
      "workflowName": "Easy Certificate Provisioning"
    },
    "data": {
      "input": {
        "requestData": [
          {
            "sequenceNo": 1,
            "scenario": "scenario",
            "fieldInfo": {
              "info": "",
              "appviewx_common_name": "<mandatory field>",
              "appviewx_dns_names": "",
              "device_type": "ADC,Server",
              "push_devices": [
                {
                  "device_vendor": "<mandatory field>",
                  "device": "<mandatory field>",
                  "linux_actions": "Default,Create KDB label (*.kdb),Certificate Overwrite (*.kdb)",
                  "selected_profiles": "<mandatory field>",
                  "password": "<mandatory field>"
                }
              ]
            }
          }
        ]
      }
    }
  }
}
```

```

    "email_id": "<mandatory field>"
  }
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```

{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "306",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 306 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}

```

# Chapter 5: Enroll Certificate and Push

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to create a certificate and push it to the selected device.

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsources	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of certificate authority.	String	NA
division	Yes	Division values for DigiCert.	String	Required only if DigiCert is selected as the CA.
cert_type	Yes	Cert Type values for DigiCert and Entrust.	String	Required only if DigiCert is selected as the CA.
auto_renew	Yes	If enabled, renewal will be scheduled to trigger before expiry based on renew_before days.	String	NA
renew_before	Yes	The renewal request will be triggered prior to the expiry date	String	Required only if auto_renew is selected.

Name	Mandatory	Description	Field Type	Constraints
		as per the selected renew_before days.		
auto_regenerate	Yes	If enabled, regenerate will be scheduled to trigger before expiry based on regenerate_before days.	String	NA
regenerate_before	Yes	The regenerate request will be triggered prior to the expiry date as per the selected regenerate_before days.	String	Required only if auto_regenerate is selected.
input_method	Yes	Certificate creation method. <b>Possible Values:</b> Manual, Policy Based, Upload CSR.	String	NA
upload_csr	Yes	CSR for the new certificate.	NA	Required only if the input_method selected is upload_csr.
description	No	Description of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dns_names	No	DNS values. (For example: www.appviewx.plus).	String	NA

Name	Mandatory	Description	Field Type	Constraints
		Multiple values must be separated by comma (.).		
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
directory_names	No	Directory names for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
rfc822names	No	Email address(es) of the user(s) to whom the certificate is issued.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
registered_ids	No	Registered id of the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
uris	No	Uniform Resource Identifier for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
othernames	No	Other names for the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone

Name	Mandatory	Description	Field Type	Constraints
				is selected as the CA.
organization	No	Name of the organization requesting the certificate.	String	Required only if AppViewX, EJBCA, Microsoft Enterprise is selected as the CA.
organization_unit	No	Organization unit requesting the certificate.	String	NA
locality	No	Locality in which the organization is situated.	String	NA
state	No	State in which the organization is located.	String	NA
country	No	Country in which the organization is located.	String	Required only if AppViewx, EJBCA, Entrust, Digicert, Microsoft Enterprise is selected as the CA.
mail_address	No	Email address of the organization.	String	NA
challenge_password	No	Password to access the certificate.	String	NA
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA

Name	Mandatory	Description	Field Type	Constraints
key_type	Yes	Key type for the certificate. <b>Possible values:</b> RSA, DSA, EC.	String	Required only when the input_method is selected as Manual or Policy Based.
bit_length	Yes	Bit length for the certificate. <b>Possible values:</b> 4096, 2048.	String	Required only when the input_method is selected as Manual or Policy Based.
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
elliptic_curve	Yes	Elliptic curve value for the certificate.	String	Required only if key_type is selected as EC.
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_issuer_common_name	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
ejbca_certificate_profile_name	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
entrust_additional_emails	No	Additional email address(es).	String	Required only if Entrust is selected as CA.

Name	Mandatory	Description	Field Type	Constraints
microsoft_enterprise_template_name	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.
user_email	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The certificates_attributes field will be passed only if the value is true.
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA
device_type	Yes	Type of device to which the certificate will be pushed. <b>Possible Values:</b> ADC, Server.	String	NA
push_devices	Yes	Contains all device fields.	Array of <a href="#">attributes</a>	NA

- [Attributes](#)
- [cert\\_attributes](#)

## Attributes

Name	Mandatory	Description	Field Type	Constraints
device_vendor	Yes	Device vendor type based on selection of device type. <b>Possible Values:</b> F5, LinuxServer, Citrix.	String	NA

Name	Mandatory	Description	Field Type	Constraints
device	Yes	Device name for selected device_vendor.	String	NA
linux_actions	Yes	Linux action for the selected device_vendor. For example: Default, Create KDB label (*.kdb), Certificate Overwrite (*.kdb).	String	Required only if the device vendor is selected as Linux Server.
selected_profiles	Yes	Profile name for device.	String	NA
apache_custom_push	Yes	Provision to opt for pushing the certificate to a custom location. <b>Possible Values:</b> Yes, No.	String	Required only if the device vendor is selected as Apache.
apache_certificate_location	Yes	Certificate path created by the user.	String	Required only if apache_custom_push is selected as Yes.
apache_key_location	Yes	Certificate Key path created by the user.	String	Required only if apache_custom_push is selected as Yes.
password	Yes	Password to access the KDB file.	String	Required only if linux_actions is selected as Default.
push_cert_type	Yes	Certificate type being pushed.	String	NA

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attribute names.	String	NA
attribute_value	No	Attribute values.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String

Name	Description	Field Type
requestType	The type of the request.	String
workorderId	The workorderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  "payload": {
```

```

"header": {
  "workflowName": "Certificate Create and Push"
},
"data": {
  "input": {
    "requestData": [
      {
        "sequenceNo": 1,
        "scenario": "scenario",
        "fieldInfo": {
          "info": "",
          "cert_category": "Server,Client,Code Signing",
          "certificate_group": "<mandatory field>",
          "certificate_authority": "DigiCert,Entrust,Ejbca,Microsoft Enterprise,Microsoft Standalone",
          "ca_account": "<mandatory field>",
          "division": "<mandatory field>",
          "cert_type": "",
          "auto_renew": "Off,On",
          "renew_before": "<mandatory field>",
          "auto_regenerate": "Off,On",
          "regenerate_before": "<mandatory field>",
          "input_method": "Manual,Policy Based,Upload CSR",
          "upload_csr": "<mandatory field>",
          "common_name": "<mandatory field>",
          "san": "DNS,IP Address",
          "directory_names": "",
          "dns_names": "",
          "rfc822names": "",
          "ip_addresses": "",
          "registered_ids": "",
          "uris": "",
          "othernames": "",
          "organization": "",
          "organization_unit": "",
          "locality": "",
          "state": "",
          "country": ""
        }
      }
    ]
  }
}

```

```

"mail_address": "",
"postal_code": "",
"validity_unit": "Days,Months,Years",
"validity_value": "1",
"challenge_password": "",
"hash_function": "<mandatory field>",
"key_type": "EC",
"bit_length": "<mandatory field>",
"elliptic_curve": "<mandatory field>",
"attributes_available": "true",
"cert_attributes": [
  {
    "attribute": "",
    "attribute_value": ""
  }
],
"digicert_server_type": "<mandatory field>",
"ejbca_end_entity_profile_name": "<mandatory field>",
"ejbca_end_entity_user_name": "",
"ejbca_issuer_common_name": "<mandatory field>",
"ejbca_certificate_profile_name": "<mandatory field>",
"entrust_additional_emails": "",
"microsoft_enterprise_template_name": "<mandatory field>",
"device_type": "ADC,Server",
"push_devices": [
  {
    "device_vendor": "<mandatory field>",
    "device": "<mandatory field>",
    "linux_action": "Default,Create KDB label (*.kdb),Certificate Overwrite (*.kdb)",
    "selected_profiles": "<mandatory field>",
    "password": "<mandatory field>",
    "push_cert_type": "<mandatory field>"
  }
],
"user_email": ""
}
}

```

```
]
},
"globalData": {},
"task_action": 1
}
}
}
```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```
{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "867",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}
```

# Chapter 6: Enroll Certificate with ServiceNow

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to create a certificate corresponding to the ticket raised on ServiceNow (RITM).

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsource	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of certificate authority.	String	NA
division	Yes	Division values for DigiCert.	String	Required only if DigiCert is selected as the CA.
cert_type	Yes	Cert Type values for DigiCert and Entrust.	String	Required only if DigiCert is selected as the CA.
description	No	Description of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA

Name	Mandatory	Description	Field Type	Constraints
san	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
organization	No	Name of the organization requesting the certificate.	String	Required only if AppViewX, EJBCA, Microsoft Enterprise is selected as the CA.
digicert_entrust_organization	Yes	Name of the organization.	String	Required only if DigiCert, Entrust is selected as the CA.
organization_unit	No	Organization unit requesting the certificate.	String	NA
locality	No	Locality in which the organization is situated.	String	NA

Name	Mandatory	Description	Field Type	Constraints
state	No	State in which the organization is located.	String	NA
country	No	Country in which the organization is located.	String	Required only if AppViewx, EJBCA, Entrust, Digicert, Microsoft Enterprise is selected as the CA.
entrust_country	Yes	Country in which the organization is located.	String	Required only if Entrust is selected as the CA.
digicert_postal_code	No	Postal code of the organization.	String	Required only if DigiCert is selected as the CA.
mail_address	No	Email address of the organization.	String	NA
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA
key_type	Yes	Key type for the certificate. <b>Possible values:</b> RSA, DSA, EC.	String	Required only when the input_method is selected as Manual or Policy Based.
bit_length	Yes	Bit length for the certificate. <b>Possible values:</b> 4096, 2048.	String	Required only when the input_method is selected as Manual or Policy Based.

Name	Mandatory	Description	Field Type	Constraints
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
elliptic_curve	Yes	Elliptic curve value for the certificate.	String	Required only if key_type is selected as EC.
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_issuer_common_name	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
ejbca_certificate_profile_name	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
entrust_additional_emails	No	Additional email address(es).	String	Required only if Entrust is selected as CA.
microsoft_enterprise_template_name	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.
user_email	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA

Name	Mandatory	Description	Field Type	Constraints
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The certificates_attributes field will be passed only if the value is true.
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA
snow_integration	Yes	Provision to opt for ServiceNow integration. <b>Possible Values:</b> Yes, No	String	NA
snow_account	No	ServiceNow account	String	Required only if ServiceNow integration is selected.
download_format	Yes	Download format for certificate type	String	Required only if ServiceNow integration is selected.

- [cert\\_attributes](#)

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attributes names.	String	NA
attribute_value	No	Attribute value.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	response
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	

HTTP Status Code	appStatusCode	Message	Possible Remediation
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  "payload": {
    "header": {
      "workflowName": "Enroll Certificate with ServiceNow"
    },
    "data": {
      "input": {
        "requestData": [
          {
            "sequenceNo": 1,
            "scenario": "scenario",
            "fieldInfo": {
              "info": ""
            }
          }
        ]
      }
    }
  }
}
```

```

"cert_category": "Server,Client,Code Signing",
"certificate_group": "<mandatory field>",
"certificate_authority": "DigiCert,Entrust,Ejbca,AppViewX,Microsoft Enterprise",
"ca_account": "<mandatory field>",
"division": "<mandatory field>",
"cert_type": "<mandatory field>",
"description": "",
"common_name": "<mandatory field>",
"san": "DNS, IP Address",
"dns_names": "",
"ip_addresses": "",
"organization": "",
"digicert_entrust_organization": "<mandatory field>",
"organization_unit": "",
"organization_address": "",
"locality": "",
"state": "",
"country": "",
"entrust_country": "<mandatory field>",
"digicert_postal_code": "",
"mail_address": "",
"validity_unit": "Days,Months,Years",
"validity_value": "<mandatory field>",
"key_type": "RSA,DSA,EC",
"bit_length": "<mandatory field>",
"hash_function": "<mandatory field>",
"elliptic_curve": "<mandatory field>",
"download_format": "(~get_certificate_download_format~)",
"check_attribute": "true",
"certificates_attributes": [
  {
    "attributes": "",
    "value": ""
  }
],
"digicert_server_type": "<mandatory field>",
"ejbca_end_entity_profile_name": "<mandatory field>",

```

```

"ejbca_end_entity_user_name": "",
"ejbca_issuer_common_name": "<mandatory field>",
"ejbca_certificate_profile_name": "<mandatory field>",
"microsoft_enterprise_template_name": "<mandatory field>",
"entrust_additional_emails": "",
"snow_integrations": "Yes,No",
"ritm": "<mandatory field>",
"snow_account": "",
"user_email": ""
}
}
],
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

## Sample Response

```

{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "867",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}

```



# Chapter 7: Enroll Certificate and Push with ServiceNow Integration

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request Response](#)

## Overview

This API is used to create a certificate corresponding to the ticket raised on ServiceNow (RITM) and push it to the selected device.

## Request Structure

**URL:** `/visualworkflow-submit-request`

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
<code>sessionId</code>	Header	Session Id received after login.	String	Required if username and password are not provided.
<code>username</code>	Header	AppViewX login username.	String	Required if sessionId is not provided.
<code>password</code>	Header	AppViewX login password.	String	Required if sessionId is not provided.
<code>gwkey</code>	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.

Name	Param Type	Description	Field Type	Constraints
gwsource	Query	Source from which the request is triggered. (For example: external)	String	NA
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of certificate authority.	String	NA
division	Yes	Division values for DigiCert.	String	Required only if DigiCert is selected as the CA.
description	No	Description of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the certificate.	String	NA

Name	Mandatory	Description	Field Type	Constraints
		<b>Possible Values:</b> DNS, IP Address		
dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
organization	No	Name of the organization requesting the certificate.	String	Required only if AppViewX, EJBCA, Microsoft Enterprise is selected as the CA.
digicert_entrust_organization	Yes	Name of the organization.	String	Required only if DigiCert, Entrust is selected as the CA.
organization_unit	No	Organization unit requesting the certificate.	String	NA
locality	No	Locality in which the organization is situated.	String	NA
state	No	State in which the organization is located.	String	NA
country	No	Country in which the organization is located.	String	Required only if AppViewx, EJBCA, Entrust, DigiCert, Microsoft Enterprise is selected as the CA.
entrust_country	Yes	Country in which the organization is located.	String	Required only if Entrust is selected as the CA.

Name	Mandatory	Description	Field Type	Constraints
digicert_postal_code	No	Postal code of the organization.	String	Required only if DigiCert is selected as the CA.
mail_address	No	Email address of the organization.	String	NA
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA
key_type	Yes	Key type for the certificate. <b>Possible values:</b> RSA, DSA, EC.	String	Required only when the input_method is selected as Manual or Policy Based.
bit_length	Yes	Bit length for the certificate. <b>Possible values:</b> 4096, 2048.	String	Required only when the input_method is selected as Manual or Policy Based.
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
elliptic_curve	Yes	Elliptic curve value for the certificate.	String	Required only if key_type is selected as EC.
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The certificates_attributes field will be passed only if the value is true.
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA
snow_integration	Yes	Provision to opt for ServiceNow integration.	String	NA

Name	Mandatory	Description	Field Type	Constraints
		<b>Possible Values:</b> Yes, No		
snow_account	No	ServiceNow account	String	Required only if ServiceNow integration is selected.
download_format	Yes	Download format for certificate type	String	Required only if ServiceNow integration is selected.
device_type	Yes	Type of device to which the certificate will be pushed. <b>Possible Values:</b> ADC, Server.	String	NA
push_devices	Yes	Contains all device fields.	Array of <a href="#">attributes</a>	NA

- [cert\\_attributes](#)
- [Attributes](#)

### cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attributes names.	String	NA
attribute_value	No	Attribute value.	String	NA

### Attributes

Name	Mandatory	Description	Field Type	Constraints
device_vendor	Yes	Device vendor type based on selection of device type. <b>Possible Values:</b>	String	NA

Name	Mandatory	Description	Field Type	Constraints
		F5, LinuxServer, Citrix.		
device	Yes	Device name for selected device_vendor.	String	NA
linux_actions	Yes	Linux action for the selected device_vendor. For example: Default, Create KDB label (*.kdb), Certificate Overwrite (*.kdb).	String	Required only if the device vendor is selected as Linux Server.
selected_profiles	Yes	Profile name for device.	String	NA
apache_custom_push	Yes	Provision to opt for pushing the certificate to a custom location. <b>Possible Values:</b> Yes, No.	String	Required only if the device vendor is selected as Apache.
apache_certificate_location	Yes	Certificate path created by the user.	String	Required only if apache_custom_push is selected as Yes.
apache_key_location	Yes	Certificate Key path created by the user.	String	Required only if apache_custom_push is selected as Yes.
password	Yes	Password to access the KDB file.	String	Required only if linux_actions is selected as Default.
push_cert_type	Yes	Certificate type being pushed.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request Response

### Sample Request

```
{
  "payload": {
    "header": {
      "workflowName": "Enroll Certificate and Push with ServiceNow"
    },
    "data": {
      "input": {
        "requestData": [
          {
            "sequenceNo": 1,

```

```

"scenario": "scenario",

"fieldInfo": {
  "info": "",
  "cert_category": "Server,Client,Code Signing",
  "certificate_group": "<mandatory field>",
  "certificate_authority": "DigiCert,Entrust,Ejbca,AppViewX,Microsoft Enterprise",
  "ca_account": "<mandatory field>",
  "division": "<mandatory field>",
  "cert_type": "<mandatory field>",
  "description": "",
  "common_name": "<mandatory field>",
  "san": "DNS, IP Address",
  "dns_names": "",
  "ip_addresses": "",
  "organization": "",
  "digicert_entrust_organization": "<mandatory field>",
  "organization_unit": "",
  "organization_address": "",
  "locality": "",
  "state": "",
  "country": "",
  "entrust_country": "<mandatory field>",
  "digicert_postal_code": "",
  "mail_address": "",
  "validity_unit": "Days,Months,Years",
  "validity_value": "<mandatory field>",
  "key_type": "RSA,DSA,EC",
  "bit_length": "<mandatory field>",
  "hash_function": "<mandatory field>",
  "elliptic_curve": "<mandatory field>",
  "download_format": "<mandatory field>",
  "check_attribute": "true",
  "certificates_attributes": [
    {
      "attributes": "",
      "value": ""
    }
  ]
}

```

```

],
  "digicert_server_type": "<mandatory field>",
  "ejbca_end_entity_profile_name": "<mandatory field>",
  "ejbca_end_entity_user_name": "",
  "ejbca_issuer_common_name": "<mandatory field>",
  "ejbca_certificate_profile_name": "<mandatory field>",
  "microsoft_enterprise_template_name": "<mandatory field>",
  "entrust_additional_emails": "",
  "device_type": "ADC,Server",
  "push_devices": [
    {
      "device_vendor": "<mandatory field>",
      "device": "<mandatory field>",
      "linux_actions": "Default,Create KDB label (*.kdb),Certificate Overwrite (*.kdb)",
      "selected_profiles": "<mandatory field>",
      "password": "<mandatory field>",
      "push_cert_type": "<mandatory field>"
    }
  ],
  "snow_integrations": "Yes,No",
  "ritm": "<mandatory field>",
  "snow_account": "",
  "user_email": ""
}
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

## Sample Response

```
{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "867",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}
```

# Chapter 8: Renew Certificate and Push

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to renew a certificate based on the certificate group and certificate authority and push it to the selected device.

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsouce	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
serial_number	Yes	Serial Number of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must	String	NA

Name	Mandatory	Description	Field Type	Constraints
		be separated by comma (,).		
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
directory_names	No	Directory names for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
rfc822names	No	Email address(es) of the user(s) to whom the certificate is issued.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
registered_ids	No	Registered id of the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
uris	No	Uniform Resource Identifier for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
othernames	No	Other names for the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
validity_unit	Yes	Unit of validity for the certificate. <b>Possible</b>	String	NA

Name	Mandatory	Description	Field Type	Constraints
		<b>Values:</b> Days, Months, Years		
validity_value	Yes	Validity value for the certificate.	String	NA
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
orderId		Order id of DigiCert certificate.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_issuer_common_name	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
ejbca_certificate_profile_name	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
entrust_additional_emails	No	Additional email address(es).	String	Required only if Entrust is selected as CA.
microsoft_enterprise_template_name	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.

Name	Mandatory	Description	Field Type	Constraints
user_email	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The certificates_attributes field will be passed only if the value is true.
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA
push_devices	Yes	Contains all push details.	Array of <a href="#">attributes</a>	NA

- [cert\\_attributes](#)
- [Attributes](#)

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attribute names.	String	NA
attribute_value	No	Attribute values.	String	NA

## Attributes

Name	Mandatory	Description	Field Type	Constraints
device_type	Yes	Type of device to which the certificate will be pushed. <b>Possible Values:</b> ADC, Server.	String	NA

Name	Mandatory	Description	Field Type	Constraints
device_vendor	Yes	Device vendor type based on selection of device type. <b>Possible Values:</b> F5, LinuxServer, Citrix.	String	NA
device	Yes	Device name for selected device_vendor.	String	NA
linux_actions	Yes	Linux action for the selected device_vendor. <b>Possible Values:</b> Default, Create KDB label (*.kdb), Certificate Overwrite (*.kdb).	String	Required only if the device vendor is selected as Linux Server.
selected_profiles	Yes	Profile name for device.	String	NA
apache_custom_push	Yes	Provision to opt for pushing the certificate to a custom location. <b>Possible Values:</b> Yes, No.	String	Required only if the device vendor is selected as Apache.
apache_certificate_location	Yes	Certificate path created by the user.	String	Required only if apache_custom_push is selected as Yes.
apache_key_location	Yes	Certificate Key path created by the user.	String	Required only if apache_custom_push is selected as Yes.

Name	Mandatory	Description	Field Type	Constraints
password	Yes	Password to access the KDB file.	String	Required only if linux_actions is selected as Default.
push_cert_type	Yes	Certificate type being pushed.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String

Name	Description	Field Type
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```

{
  "payload": {
    "header": {
      "workflowName": "Renew Certificate and Push"
    },
    "data": {
      "input": {
        "requestData": [
          {
            "sequenceNo": 1,
            "scenario": "scenario",
            "fieldInfo": {
              "info": "",
              "cert_category": "Server,Client",
              "certificate_group": "<mandatory field>",
              "certificate_authority": "Microsoft Enterprise,DigiCert,Ejbca,Entrust",
              "serial_number": "<mandatory field>",
              "common_name": "<mandatory field>",
              "san": "DNS,Directory Name,Email,IP Address,Registered ID,URL,Other Name",
              "dNSNames": "",
              "directoryNames": "",
              "IPAddresses": "",
              "registeredIDs": "",
              "otherNames": "",
              "uniformResourceIdentifiers": "",
              "rfc822Names": "",
              "validity_unit": "<mandatory field>",
              "validity_value": "<mandatory field>",
              "hash_function": "<mandatory field>",
              "attributes_available": "true",
              "cert_attributes": [
                {
                  "attribute": "",
                  "attribute_value": ""
                }
              ]
            }
          ]
        }
      }
    }
  }
}

```

```

"orderId": "",
"digicert_server_type": "<mandatory field>",
"ejbca_End_Entity_Profile_Name": "<mandatory field>",
"ejbca_End_Entity_User_Name": "",
"ejbca_Issuer_Common_Name": "<mandatory field>",
"ejbca_Certificate_Profile_Name": "<mandatory field>",
"microsoft_enterprise_template_name": "<mandatory field>",
"entrust_additional_emails": "",
"push_devices": [
  {
    "device_type": "ADC,Server",
    "device_vendor": "<mandatory field>",
    "device": "<mandatory field>",
    "linux_actions": "Default,Create KDB label (*.kdb),Certificate Overwrite (*.kdb)",
    "selected_profiles": "<mandatory field>",
    "password": "<mandatory field>",
    "push_cert_type": "<mandatory field>"
  }
],
"user_email": "(~get_logged_user_email_id~)"
}
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```

{
  "response": {
    "workorderId": "0",
    "requestType": "default",
  }
}

```

```
"requestId": "867",  
"workflowVersion": "master",  
"message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",  
"status": "In Progress",  
"statusCode": 0  
},  
"message": "Success",  
"appStatusCode": null,  
"tags": null,  
"headers": null  
}
```

# Chapter 9: Renew Certificate with ServiceNow Integration

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to renew a certificate based on the certificate group and certificate authority and attach the renewed certificate to the ServiceNow ticket.

## Request Structure

**URL:** `/visualworkflow-submit-request`

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
<code>sessionId</code>	Header	Session Id received after login.	String	Required if username and password are not provided.
<code>username</code>	Header	AppViewX login username.	String	Required if sessionId is not provided.
<code>password</code>	Header	AppViewX login password.	String	Required if sessionId is not provided.
<code>gwkey</code>	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.

Name	Param Type	Description	Field Type	Constraints
gwsource	Query	Source from which the request is triggered. (For example: external)	String	NA
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
group_name	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of Selected CA	String	NA
certificate	Yes	Universal Unique Identifier (UUID) of the certificate.	String	NA
serial_number	Yes	Serial Number of the certificate	String	NA
common_name	Yes	Common Name of the certificate	String	NA

Name	Mandatory	Description	Field Type	Constraints
san_type	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dNSNames	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
iPAddresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
directory_names	No	Directory names for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
uniformResourceIdentifiers	No	Uniform Resource Identifier for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
otherNames	No	Other names for the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
registeredIDs	No	Registered id of the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
validity	Yes	Unit of validity for the certificate. <b>Possible</b>	String	NA

Name	Mandatory	Description	Field Type	Constraints
		<b>Values:</b> Days, Months, Years		
validity_value	Yes	Validity value for the certificate.	String	NA
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
cert_attributes	No	Details of certificate attributes.	Array of <a href="#">attrib_details</a>	NA
email_id	No	Email address of the organization. <b>Possible Values:</b> Default value configured in the policy	String	NA
snow_integration	Yes	Provision to opt for ServiceNow integration. <b>Possible Values:</b> Yes, No	String	NA
ritm	Yes	RITM ticket number for ServiceNow ticket	String	Required only if ServiceNow integration is selected.
snow_account	No	ServiceNow account	String	Required only if ServiceNow integration is selected.
download_format	Yes	Format in which the certificate will be downloaded.	String	Required only if ServiceNow integration is selected.
show_validity	Yes	Hidden field inside the form. Default value is '1'	String	NA

- [attrib\\_details](#)

## attrib\_details

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attributes names.	String	NA
attribute_value	No	Attribute Value.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String

Name	Description	Field Type
requestType	The type of the request.	String
workorderId	The workorderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  "payload": {
```

```

"header": {
  "workflowName": "Renew Certificate"
},
"data": {
  "input": {
    "requestData": [
      {
        "sequenceNo": 1,
        "scenario": "scenario",
        "fieldInfo": {
          "info": "",
          "category": "Server_Client",
          "group_name": "<mandatory field>",
          "policy_hidden": "",
          "certificate_authority": "<%certificate_authority%>",
          "certificate": "",
          "ca_account": "",
          "comman_name": "<mandatory field>",
          "san_type": "DNS,Directory Name,Email,IP Address,Registered ID,URL,Other Name",
          "dNSNames": "",
          "IPAddresses": "",
          "rfc": "",
          "directory_names": "",
          "uniformResourceIdentifiers": "",
          "otherNames": "",
          "registeredIDs": "",
          "division": "",
          "organisation": "",
          "organisation_unit": "",
          "country": "",
          "city": "",
          "state": "",
          "postalcode": "",
          "mailaddress": "",
          "validity": "",
          "validity_value": "",
          "hash_function": "<mandatory field>"
        }
      }
    ]
  }
}

```

```

"bit_length": "",
"key_type": "",
"attrib_details": [
  {
    "cert_attribute_name": "",
    "cert_attribute_value": ""
  }
],
"order_id": "",
"server_type": "",
"order_validity": "",
"order_val_till": "",
"end_entity_profile_name": "",
"end_entity_user_name": "",
"issuer_common_name": "",
"certificate_profile_name": "",
"template_name": "",
"additional_email": "",
"resource": "",
"serial_number": "<mandatory field>",
"email_id": "(~get_logged_user_email_id~)",
"ca": "",
"description": ""
}
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```
{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "867",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}
```

# Chapter 10: Renew Certificate and Push With ServiceNow Integration

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to renew a certificate based on the certificate group and certificate authority, push it to a device, and attach the renewed certificate to the ServiceNow ticket.

## Request Structure

**URL:** `/visualworkflow-submit-request`

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
<code>sessionId</code>	Header	Session Id received after login.	String	Required if username and password are not provided.
<code>username</code>	Header	AppViewX login username.	String	Required if sessionId is not provided.
<code>password</code>	Header	AppViewX login password.	String	Required if sessionId is not provided.
<code>gwkey</code>	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.

Name	Param Type	Description	Field Type	Constraints
gwsource	Query	Source from which the request is triggered. (For example: external)	String	NA
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
serial_number	Yes	Serial Number of the certificate.	String	NA
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dns_names	No	DNS values. (For example:	String	NA

Name	Mandatory	Description	Field Type	Constraints
		www.appviewx.plus). Multiple values must be separated by comma (,).		
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
directory_names	No	Directory names for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
rfc822names	No	Email address(es) of the user(s) to whom the certificate is issued.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
registered_ids	No	Registered id of the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
uris	No	Uniform Resource Identifier for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
othernames	No	Other names for the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.

Name	Mandatory	Description	Field Type	Constraints
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
orderid		Order id of DigiCert certificate.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_issuer_common_name	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
ejbca_certificate_profile_name	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
entrust_additional_emails	No	Additional email address(es).	String	Required only if Entrust is selected as CA.

Name	Mandatory	Description	Field Type	Constraints
microsoft_enterprise_template_name	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.
user_email	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA
snow_integration	Yes	Provision to opt for ServiceNow integration. <b>Possible Values:</b> Yes, No	String	NA
ritm	Yes	RITM ticket number for ServiceNow ticket	String	Required only if ServiceNow integration is selected.
snow_account	No	ServiceNow account	String	Required only if ServiceNow integration is selected.
download_format	Yes	Download format for the certificate.	String	Required only if ServiceNow integration is selected.
check_attribute	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The certificates_attributes field will be passed only if the value is true.
cert_attributes	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA

- [cert\\_attributes](#)

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
attribute	No	Certificate attribute names.	String	NA
attribute_value	No	Attribute values.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String

Name	Description	Field Type
requestType	The type of the request.	String
workorderId	The workorderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  "payload": {
```

```

"header": {
  "workflowName": "Renew Certificate and Push with ServiceNow"
},
"data": {
  "input": {
    "requestData": [
      {
        "sequenceNo": 1,
        "scenario": "scenario",
        "fieldInfo": {
          "info": "",
          "cert_category": "Server,Client",
          "certificate_group": "<mandatory field>",
          "certificate_authority": "<mandatory field>",
          "serial_number": "<mandatory field>",
          "common_name": "<mandatory field>",
          "san": "DNS,Directory Name,Email,IP Address,Registered ID,URL,Other Name",
          "dNSNames": "",
          "directoryNames": "",
          "iPAddresses": "",
          "registeredIDs": "",
          "otherNames": "",
          "uniformResourceIdentifiers": "",
          "rfc822Names": "",
          "validity_unit": "<mandatory field>",
          "validity_value": "<mandatory field>",
          "hash_function": "",
          "download_format": "(~get_certificate_download_format~)",
          "cert_attributes": [
            {
              "attributes": "",
              "attribute_value": ""
            }
          ],
          "snow_integrations": "Yes,No",
          "ritm": "<mandatory field>",
          "snow_account": "(~get_ServiceNow_accounts~)",

```

```

    "user_email": "(~get_logged_user_email_id~)"
  }
}
]
},
"globalData": {},
"task_action": 1
}
}
}

```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```

{
  "response": {
    "workorderId": "0",
    "requestType": "default",
    "requestId": "867",
    "workflowVersion": "master",
    "message": "Workflow Request is created with Id 867 . Request submitted to workflow engine for processing workorder.",
    "status": "In Progress",
    "statusCode": 0
  },
  "message": "Success",
  "appStatusCode": null,
  "tags": null,
  "headers": null
}

```

# Chapter 11: Regenerate Certificate - With New CSR

- [Overview](#)
- [Request Structure](#)
- [Payload](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

This API is used to regenerate a certificate with a new CSR.

## Request Structure

**URL:** /visualworkflow-submit-request

**Type:** POST

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.
gwsources	Query	Source from which the request is triggered. (For example: external)	String	NA

Name	Param Type	Description	Field Type	Constraints
payload	Body	Contains all the params to be sent in the request body for the post request.	payload	NA

## Payload

Name	Mandatory	Description	Field Type	Constraints
cert_category	Yes	Specifies the certificate category. <b>Possible values:</b> Server, Client	String	NA
certificate_group	Yes	Specifies the group under which the created certificate needs to be tagged.	String	NA
certificate_authority	Yes	Name of the certificate authority that will issue the certificate.	String	NA
ca_account	Yes	CA account Name of certificate authority.	String	NA
division	Yes	Division values for DigiCert.	String	Required only if DigiCert is selected as the CA.
cert_type	Yes	Cert Type values for DigiCert and Entrust.	String	Required only if DigiCert, Entrust is selected as the CA.
input_method	Yes	Certificate creation method. <b>Possible Values:</b> Manual, Policy Based, Upload CSR.	String	NA

Name	Mandatory	Description	Field Type	Constraints
upload_csr	Yes	CSR for the new certificate.	NA	Required only if the input_method selected is upload_csr.
common_name	Yes	Common Name of the certificate.	String	NA
san	No	Subject Alternative Name of the certificate. <b>Possible Values:</b> DNS, IP Address	String	NA
dns_names	No	DNS values. (For example: www.appviewx.plus). Multiple values must be separated by comma (,).	String	NA
ip_addresses	No	IP values (For example: 192.16x.xx.x). Multiple values must be separated by comma(,).	String	NA
directory_names	No	Directory names for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
rfc822names	No	Email address(es) of the user(s) to whom the certificate is issued.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.

Name	Mandatory	Description	Field Type	Constraints
registered_ids	No	Registered id of the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
uris	No	Uniform Resource Identifier for the certificate.	String	Required only when EJBCA, Microsoft Enterprise, Microsoft Standalone is selected as the CA.
othernames	No	Other names for the certificate.	String	Required only when Microsoft Enterprise, Microsoft Standalone is selected as the CA.
organization	No	Name of the organization requesting the certificate.	String	Required only if AppViewX, EJBCA, Microsoft Enterprise is selected as the CA.
organization_unit	No	Organization unit requesting the certificate.	String	NA
locality	No	Locality in which the organization is situated.	String	NA
state	No	State in which the organization is located.	String	NA
country	No	Country in which the organization is located.	String	Required only if AppViewx, EJBCA, Entrust, Digicert, Microsoft Enterprise is selected as the CA.

Name	Mandatory	Description	Field Type	Constraints
mail_address	No	Email address of the organization.	String	NA
challenge_password	No	Password to access the certificate.	String	NA
validity_unit	Yes	Unit of validity for the certificate. <b>Possible Values:</b> Days, Months, Years.	String	NA
validity_value	Yes	Validity value for the certificate.	String	NA
key_type	Yes	Key type for the certificate. <b>Possible values:</b> RSA, DSA, EC.	String	Required only when the input_method is selected as Manual or Policy Based.
bit_length	Yes	Bit length for the certificate. <b>Possible values:</b> 4096, 2048.	String	Required only when the input_method is selected as Manual or Policy Based.
hash_function	Yes	Hash function for the certificate. <b>Possible values:</b> SHA256.	String	NA
digicert_server_type	Yes	DigiCert server type value.	String	Required only if DigiCert is selected as CA.
ejbca_end_entity_profile_name	Yes	Profile name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.
ejbca_end_entity_user_name	No	User name of the EJBCA end entity.	String	Required only if EJBCA is selected as CA.

Name	Mandatory	Description	Field Type	Constraints
<code>ejbca_issuer_common_name</code>	Yes	Common name of the EJBCA issuer.	String	Required only if EJBCA is selected as CA.
<code>ejbca_certificate_profile_name</code>	Yes	Profile name associated with the EJBCA certificate.	String	Required only if EJBCA is selected as CA.
<code>entrust_additional_emails</code>	No	Additional email address(es).	String	Required only if Entrust is selected as CA.
<code>microsoft_enterprise_template_name</code>	Yes	Template name for Microsoft Enterprise.	String	Required only if Microsoft Enterprise is selected as CA.
<code>user_email</code>	Yes	Email address for sending notification of the status of certificate creation and push.	String	NA
<code>check_attribute</code>	No	Certificate attribute values. <b>Possible Values:</b> true, false.	String	The <code>certificates_attributes</code> field will be passed only if the value is true.
<code>cert_attributes</code>	No	Array of certificate attributes	Array of <a href="#">cert_attributes</a>	NA

- [cert\\_attributes](#)

## cert\_attributes

Name	Mandatory	Description	Field Type	Constraints
<code>attribute</code>	No	Certificate attribute names.	String	NA
<code>attribute_value</code>	No	Attribute values.	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response params for the search object request.	<a href="#">response</a>
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

- [Response](#)

## Response

Name	Description	Field Type
requestId	Unique identifier for the request.	String
workflowVersion	Version of the workflow.	String
message	The message with the status and request number for the request.	String
status	Status of the request.	String
stausCode	Status code for the request.	String
requestType	The type of the request.	String
workorderId	The workoderid for the request If there is no workorder the value will be 0.	String

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK		Success	
400 Bad Request	avx-common-028	Invalid/ Incorrect payload	Check and ensure if a valid value is given in the request payload field - input.
401 Unauthorized	WORKFLOW_1679	User is not authorized.	Logged-in user is not authorized to access the workflow.
404 Not Found	engine-db-015	Workflow not found.	Invalid workflow data.
409 Conflict	WORKFLOW_1475	Given workflow is not in enabled state.	Given workflow is not in enabled state.
500 Internal Server Error	WORKFLOW_1617	Invalid form data Please provide all mandatory data	Check and ensure if a valid value is given in the request payload field - input.
500 Internal Server Error	NA	Error while processing	

## Sample Request/Response

### Sample Request

```
{
  {
    "payload": {
      "header": {
        "workflowName": "Regenerate Certificate - With New CSR"
      },
    },
    "data": {
      "input": {
        "requestData": [
          {

```

```
"sequenceNo": 1,
"scenario": "scenario",
"fieldInfo": {
  "info": "",
  "cert_category": "Server,Client",
  "certificate_group": "<mandatory field>",
  "certificate_authority": "Ejbca,Microsoft Enterprise,DigiCert,Entrust",
  "ca_account": "<mandatory field>",
  "division": "",
  "cert_type": "",
  "serial_number": "<mandatory field>",
  "input_method": "Manual,Upload CSR",
  "cert_profile": "",
  "upload_csr": "<mandatory field>",
  "fetch_csr_params": "",
  "common_name": "<mandatory field>",
  "csr_common_name": "",
  "san": "DNS,Directory Name,Email,IP Address,Registered ID,URL,Other Name",
  "csr_san": "DNS,Directory Name,IP Address,Registered ,ID,URL,Other Name,Email",
  "csr_dns": "",
  "dNSNames": "",
  "directoryNames": "",
  "iPAddresses": "",
  "registeredIDs": "",
  "otherNames": "",
  "uniformResourceIdentifiers": "",
  "rfc822names": "",
  "organization": "",
  "csr_iPAddresses": "",
  "csr_uniformResourceIdentifiers": "",
  "csr_directoryNames": "",
  "csr_registeredIDs": "",
  "csr_otherNames": "",
  "csr_rfc822names": "",
  "csr_organization": "",
  "organization_unit": "",
  "csr_organization_unit": ""
```

```

"locality": "",
"csr_locality": "",
"state": "",
"csr_state": "",
"country": "",
"csr_email_address": "",
"mail_address": "",
"challenge_password": "",
"csr_challenge_password": "",
"csr_country": "",
"digicert_postal_code": "",
"validity_unit": "<mandatory field>",
"validity_value": "<mandatory field>",
"csr_key_type": "EC",
"key_type": "EC",
"bit_length": "<mandatory field>",
"csr_bit_length": "",
"hash_function": "<mandatory field>",
"csr_hash_function": "",
"attributes_available": "true",
"cert_attributes": [
  {
    "attributes": "",
    "attribute_value": ""
  }
],
"ejbca_End_Entity_Profile_Name": "<mandatory field>",
"ejbca_End_Entity_User_Name": "",
"ejbca_Issuer_Common_Name": "<mandatory field>",
"ejbca_Certificate_Profile_Name": "<mandatory field>",
"digicert_server_type": "<mandatory field>",
"microsoft_enterprise_template_name": "<mandatory field>",
"entrust_additional_emails": "",
"user_email": "(~get_logged_user_email_id~)"
}
}
]

```

```
},  
"globalData": {},  
"task_action": 1  
}  
}  
}
```



**Note:** Please refer to the [Request Structure](#) to identify the changeable values.

### Sample Response

```
{  
  {  
    "response": {  
      "workorderId": "0",  
      "requestType": "default",  
      "requestId": "867",  
      "workflowVersion": "master",  
      "message": "Workflow Request is created with Id 897 . Request submitted to workflow engine for processing workorder.",  
      "status": "In Progress",  
      "statusCode": 0  
    },  
    "message": "Success",  
    "appStatusCode": null,  
    "tags": null,  
    "headers": null  
  }  
}
```

# Chapter 12: Get Request Summary/Log

- [Overview](#)
- [Request Structure](#)
- [Response Structure](#)
- [Status Codes](#)
- [Sample Request/Response](#)

## Overview

After you are done submitting a workflow you can get the request summary/logs details of a particular workflow request. The execution details of the workflow can be viewed from these logs.

## Request Structure

**URL:** `/visualworkflow-request-logs`

**Type:** GET

Name	Param Type	Description	Field Type	Constraints
sessionId	Header	Session Id received after login.	String	Required if username and password are not provided.
username	Header	AppViewX login username.	String	Required if sessionId is not provided.
password	Header	AppViewX login password.	String	Required if sessionId is not provided.
content-type	Header	Specifies the nature of the data in the payload	String	Value of the param should be <code>application/json</code>
gwkey	Query	Tenant Key	String	This is required only in case of multi-tenant installations and can be ignored in other types of installations.

Name	Param Type	Description	Field Type	Constraints
gwsource	Query	Source from which the request is triggered. (For example: external)	String	NA
ids	Query	Request IDs	String	NA

## Response Structure

200 OK returns string of type application/json with the following body params:

Name	Description	Field Type
response	Contains the response object along with the hierarchy of the object mapped in field children.	Key value pair
message	Success message or failure description in case of error.	String
appStatusCode	Application specific status code for the response. Will be non-null for failure response.	String
tags	More info in case of failure response.	NA

## Status Codes

HTTP Status Code	appStatusCode	Message	Possible Remediation
200 OK	NA	Success	NA
400 Bad Request	WORKFLOW_1300	Workflow Request Id is Mandatory.	Check and ensure if a valid Request Id is given.
404 Not Found	engine-db-011	Request not found.	Invalid workflow data.

# Sample Request/Response

## Sample Request

NA

## Sample Response

```
{
  "response": {
    "workOrderList": [
      {
        "statusCode": 1,
        "requestId": "410",
        "created_by": "admin",
        "status": "Completed",
        "workflowName": "Copy of reviewComponent Test",
        "toolTip": null,
        "workorder_id": null,
        "description": null,
        "ticket_details": null,
        "tasks": [
          {
            "state": 1,
            "comments": null,
            "task_name": "WorkOrder",
            "task_id": "startWorkOrder_1",
            "user": "admin",
            "task_status": "Success",
            "task_start_time": 1502696313667,
            "task_end_time": 1502696729781,
            "logs": [
              {
                "time": 1502696313815,
                "message": "Child WorkOrder ID: 1, has been created for the Child workflow: WorkOrder"
              },
              {
                "time": 1502696729781,
                "message": "WorkOrder Completed"
              }
            ]
          }
        ]
      }
    ]
  }
}
```

```
    }  
  ]  
}  
],  
  "created_time": 1502696305239,  
  "rollback_reference_id": "",  
  "clone_reference_ids": [],  
  "last_updated": 1502696305239,  
  "running_time": 0  
}  
]  
},  
  "message": null,  
  "appStatusCode": null,  
  "tags": null  
}
```