# Domain Control Validation in Comodo Certificate Manager

The purpose of this document is to explain the new domain control validation (DCV) processes for the Comodo Certificate Manager.

DCV is an industry wide directive that requires all Certificate Authorities (CAs) to verify domain control prior to the issuance of a certificate to a domain. This affects all new certificate applications and certificate renewals. DCV requirements apply to all SSL web-server certificate types ordered via any channel. This includes our retail customers, resellers, affiliates and enterprise customers.

Comodo has simplified the DCV process for our customers by seamlessly integrating DCV fulfillment wizards into the CCM interface. We are always looking for feedback from our customers so, if you have any questions not answered by this document, then please contact us at **CSMSupport@comodo.com**.

- **What is DCV?**
- **What implementation choices are available?**
- **How to initiate DCV in CCM?**

## What is DCV?

- Before any SSL certificate can be issued, the registrable domain name (e.g. domain.com, domain.edu, domain.net, etc.) must pass DCV. This confirms to Comodo that the applicant has control of the domain for which the certificate application is being made. Once passed, DCV will remain valid for domain names within CCM for 1 year (meaning subsequent certificates can be issued to the same domain without requiring another round of DCV).

- Customers can initiate DCV on an individual basis or, if all domains share a common 'WhoIs' email record, may initiate DCV on multiple domains at once.

- Customers can complete DCV using any one of three supported methods - Email, CNAME or HTTP/HTTPS. Customers can use any combination of the three methods across their domains as per business preference.

- If a wildcard domain is created and delegated to an Organization or a Department, CCM will validate only the registered High Level Domain (HLD). If the HLD is successfully validated, all the sub domains within the name space of the HLD will be considered validated.

- For Multi-Domain Certificates and Unified Communications Certificates, all listed domains must pass DCV.

- Your existing domains will continue to work. DCV only comes into effect when an existing domain is next up for renewal. However, we recommend that you complete DCV for all of your domains as quickly as possible.

## What implementation choices are available?

There are three supported methods of DCV - Email, HTTP/HTTPS and CNAME.

### Email

When using the email challenge-response system, the applicant must be able to receive an email sent to an address at the domain for which the application is being made.

The email will contain a unique validation code that the applicant has to paste into a confirmation web-page before the application can proceed. Comodo's automated system will retrieve addresses registered to the domain from the Whois database and present them to the application for selection. The system also presents a selection of 'typical' addresses, such as admin@domain.com, webmaster@domain.com,

hostmaster@domain.com, administrator@domain.com and postmaster@domain.com.

The Email method can be used for both validating a single domain and multiple domains at a time.

**How to initiate Email DCV**

**HTTP / HTTPS**

CCM generates a specific text (.txt) file which must be placed on the root directory of the domain undergoing DCV. Comodo's automated system will check for the presence and content of this file to complete the validation process. Administrators need to upload it only to the location mentioned in the wizard before clicking the 'Test' button.

**How to initiate HTTP / HTTPS DCV**

**CNAME**

CCM will generate two specific hashes which must be entered as a CNAME DNS record. Comodo's automated system will check for the presence of the two hashes in your DNS records. DCV will be achieved after a successful CNAME check. Please use this format:
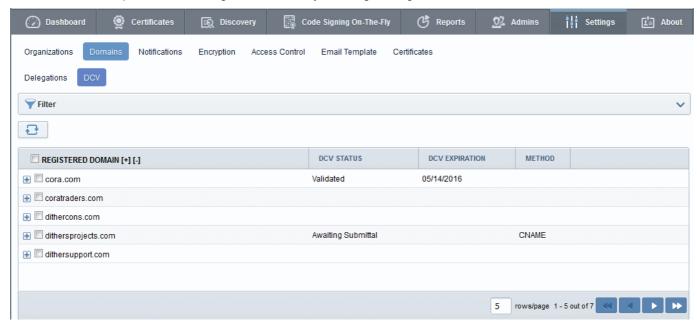
<MD5 hash>.yourdomain.com CNAME <SHA-1 hash>.comodoca.com

**How to initiate CNAME DCV**

## How to initiate DCV in CCM

**Note** - Prior to initiating DCV, administrators should add domains to CCM, delegate the domain to either an Organization or a Department and await approval by Comodo. Once the domain shows as "Approved" in the CCM:

• First open the DCV configuration screen by selecting 'Settings' > 'Domains' > 'DCV'



| Column Display | Description |
|---|---|
| Registered Domain | A list of all available Domains created for this account. Clicking the '+' beside a domain name displays the sub-domains of the registered domain. |

| Column Display | Description |
| --- | --- |
| DCV Status | Indicates the validation status of the domain. The status can be one of the following:<br>• Not Started - The DCV process has not been initiated for the registered high level domain (HLD).<br>• Awaiting Submittal - The DCV process has been initiated but the request has not yet been submitted to the Domain Administrator. This status will be available only for the following DCV methods:<br>    • HTTP / HTTPS<br>    • CNAME<br>• Submitted - The DCV request has been submitted to the domain administrator.<br>• Validated - The registered high level domain (HLD) has been successfully validated<br>• Expired - The DCV request has expired for the HLD. |

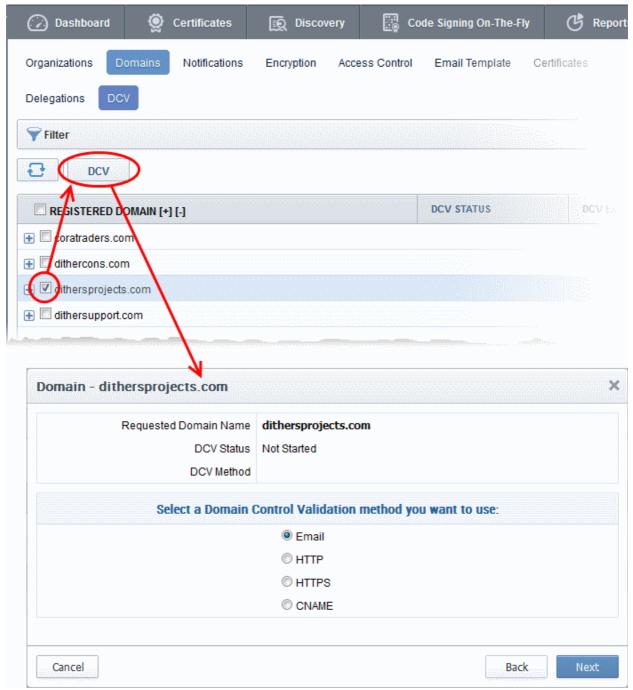| Column Display | Description |
|---|---|
| DCV Expiration | Indicates the expiry date of the DCV request. |
| Method | Indicates the DCV method chosen by the administrator for validating the domain. |
| DCV Control Button<br><br>**Note**: The  DCV Control button appears only on selecting a domain. | Enables the MRAO and RAO/DRAO SSL Administrators to initiate or restart the DCV process for the selected Domain. |

The following sections explain on:

- **Validating a single domain**
- **Validating multiple domains at a time**

## Validating a Single Domain

- Initiate DCV by selecting the domain and clicking the 'DCV' button that appears at the top. This will open the DCV wizard:
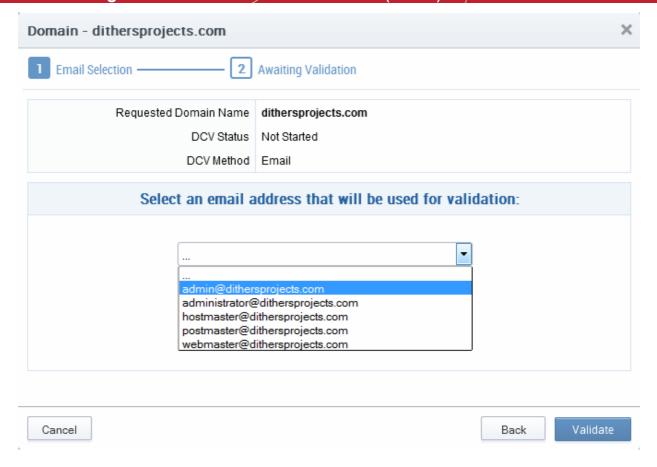
Select one of these DCV methods:

- **Email**
- **HTTP / HTTPS**
- **CNAME**

## Email

After choosing 'Email', the next step is to choose the address to which the DCV challenge-response email will be sent. The applicant must, of course, be able to receive emails at this address. DCV will be completed when the applicant verifies domain control by clicking a link in the email.
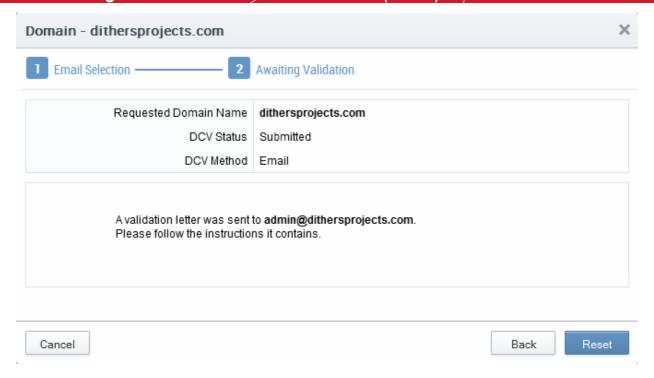
The drop-down menu contains a list of registered email addresses for this domain that have been dynamically drawn from Whois. It also contains 'typical' email addresses such as:

- admin@domain.com
- administrator@domain.com
- hostmaster@domain.com
- postmaster@domain.com
- webmaster@domain.com

Click the 'Validate' button after making your selection. A challenge-response email will be sent to the selected email address. The DCV status of the domain will change to 'Submitted'.

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Upon receiving the email, the applicant should click the link in the email and enter the unique code into a validation web-form. If DCV is successful, the status of the domain will change to 'Validated'.

## HTTP/HTTPS

CCM generates a specific text (.txt) file which must be placed on the root directory of the domain undergoing DCV. Comodo systems will check for the presence and content of this file and if verified as correct, the domain will pass DCV.

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**Domain - dithersprojects.com**  ✕

1 Get Validation Info ——— 2 Preliminary Test ——— 3 Awaiting Validation

| Requested Domain Name | dithersprojects.com |
|---|---|
| DCV Status | Awaiting Submittal |
| DCV Method | HTTPS_CSR_Hash |

| SHA1 Hash | 72B21EEE5B37D791308461F4BB041A1845F87DC8 |
|---|---|
| MD5 Hash | CC5412BF14B25A69F0D3A571C2426767 |

**Instructions for HTTPS DCV:**

1. Create a text file containing the following two lines:

72B21EEE5B37D791308461F4BB041A1845F87DC8
comodoca.com

or get it from here: Download

2. Save the file with the following name (case sensitive):

CC5412BF14B25A69F0D3A571C2426767.txt

Cancel     Back     **Test**

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Place the file in the root directory of the domain in question so that it is publicly accessible at one of the paths specified in step number three (see image above). Click 'Test' to check that the file has been uploaded correctly. If correct, the 'Submit' dialog will appear and the DCV status of the domain will change to 'Submitted'. Comodo systems will now attempt to perform DCV by checking for this file. If successful, the DCV status of the domain will change to 'Validated'.

If you need time to get the file uploaded to your server, you can close this wizard and submit later. This can be done by returning to the main DCV interface ('Settings' > 'Domains' > 'DCV' ) then clicking the DCV button alongside the appropriate domain. Again, you need to click 'Test' then 'Submit'.
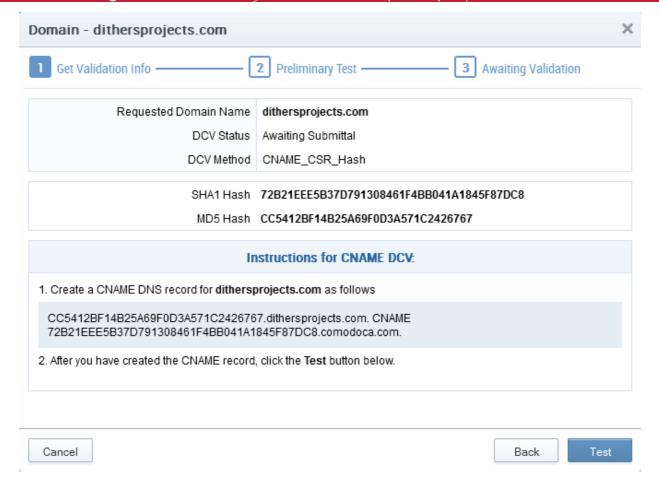
## DNS CNAME

The CNAME method allows you to complete DCV by creating a CNAME DNS record which includes two unique hash values (MD5 & SHA1) generated for you by CCM. The CNAME record should be passed to your domain administrator for implementation, if necessary. The format we look for:

<MD5 hash>.yourdomain.com CNAME <SHA-1 hash>.comodoca.com

**Domain - dithersprojects.com** ✕

| 1 | Get Validation Info | 2 | Preliminary Test | 3 | Awaiting Validation |

| | |
|---|---|
| Requested Domain Name | dithersprojects.com |
| DCV Status | Awaiting Submittal |
| DCV Method | CNAME_CSR_Hash |

| | |
|---|---|
| SHA1 Hash | 72B21EEE5B37D791308461F4BB041A1845F87DC8 |
| MD5 Hash | CC5412BF14B25A69F0D3A571C2426767 |

**Instructions for CNAME DCV:**

1. Create a CNAME DNS record for **dithersprojects.com** as follows

CC5412BF14B25A69F0D3A571C2426767.dithersprojects.com. CNAME
72B21EEE5B37D791308461F4BB041A1845F87DC8.comodoca.com.

2. After you have created the CNAME record, click the **Test** button below.

Cancel    Back    Test

Copy the CNAME DNS record provided and pass it to your domain administrator. Click 'Test' to check the record is correct. If correct, the 'Submit' dialog will appear. The DCV status of the domain will change to 'Submitted'. Comodo systems will now attempt to perform DCV by checking for this record. If successful, the DCV status of the domain will change to 'Validated'.
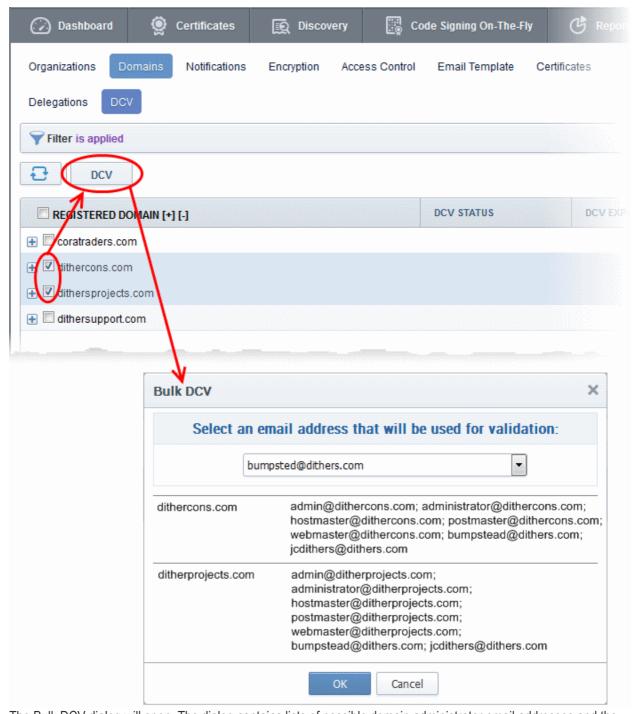
If you need time to get the record created, you can close this wizard and submit later. This can be done by returning to the main DCV interface ('Settings' > 'Domains' > 'DCV' ) then clicking the DCV button alongside the appropriate domain. Again, you need to click 'Test' then 'Submit'.

### Validating Multiple Domains at a time

1. Initiate DCV by selecting the domains that share common domain administrator email address
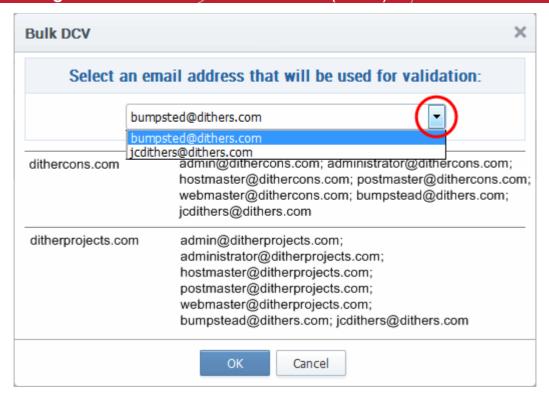2. Click the 'DCV' button

The Bulk DCV dialog will open. The dialog contains lists of possible domain administrator email addresses and the email addresses fetched from the WhoIs database for each domain. Common email addresses identified from the lists are displayed in the drop-down at the top.

3.  Select the email address of the administrator who can receive and respond to the validation mail from the drop-down and click 'OK'.

An automated email will be sent to the selected Domain Administrator email address. The DCV status of the Domain will change to 'Submitted'.

On receiving the email, the domain administrator should click the validation link in it to open the validation form and enter the validation code contained in the email, in order to complete the validation process. Once completed, the DCV status of the Domains will change to 'Validated'.

## Additional Resources

-   Certificate Manager MRAO Admin Guide -  Section 6.4.2.1.2 DCV
-   Certificate Manager RAO Admin Guide -  Section 6.4.2.1.2 DCV
-   Comodo Support Knowledge Base: **https://support.comodo.com/index.php?_m=knowledgebase&_a=viewarticle&kbarticleid=1367**

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# About Comodo

The Comodo organization is a global innovator and developer of cyber security solutions, founded on the belief that every single digital transaction deserves and requires a unique layer of trust and security. Building on its deep history in SSL certificates, antivirus and endpoint security leadership, and true containment technology, individuals  and enterprises rely on Comodo's proven solutions to authenticate, validate and secure their most critical information.

With data protection covering endpoint, network and mobile security, plus identity and access management, Comodo's proprietary technologies help solve the malware and cyber-attack challenges of today. Securing online transactions for thousands of businesses, and with more than 85 million desktop security software installations, Comodo is Creating Trust Online®.  With United States headquarters in Clifton, New Jersey, the Comodo organization has offices in China, India, the Philippines, Romania, Turkey, Ukraine and the United Kingdom.

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