



Comodo Certificate Manager

Reports Web Services API

Table of Contents

1.Introduction.....	4
2. Authentication.....	4
2.1.Authentication via Username and Password.....	4
2.2.Authentication via Username and a Client Certificate.....	5
3.Remote Functions.....	5
3.1.Function for Getting Activity Report.....	5
3.1.1.Arguments.....	5
3.1.1.1.AuthData type.....	5
3.1.2.Return value - ActivityReportResponse.....	6
3.1.2.1.ReportRow Activity.....	6
3.1.2.2.WSAction.....	6
3.1.2.3.WSAdmin.....	6
3.1.2.4.WSPerson.....	7
3.1.2.5.WSOrganization.....	7
3.1.2.6.WSSMIME.....	7
3.1.2.7.WSSSL.....	8
3.1.2.8.WSNotification.....	8
3.1.3.Throws Exceptions.....	8
3.2.Function for Getting Client Certificates Report.....	8
3.2.1.Arguments.....	8
3.2.1.1.AuthData type.....	9
3.2.2.Return value - ClientCertReportResponse.....	9
3.2.2.1.ReportRowClientCert.....	9
3.2.3.Throws Exceptions.....	10
3.3.Function for Getting SSL Certificates Report.....	10
3.3.1.Arguments.....	10
3.3.1.1.AuthData type.....	11
3.3.2.Return value - SSLReportResponse.....	11
3.3.2.1.ReportRowSSL.....	11
3.3.3.Throws Exceptions.....	12
3.4.Function for Getting Discovery Scan Log Report.....	12
3.4.1.Arguments.....	12
3.4.2.Return value - DiscoveryReportResponse.....	13
3.4.2.1.ReportRowDiscovery.....	13
3.4.3.Throws Exceptions.....	14
3.5.Function for Getting Discovery Scan Detail Report.....	14
3.5.1.Arguments.....	14
3.5.2.Return value - DiscoveryDetailReportResponse.....	14
3.5.2.1.ReportRowDiscoveryDetail.....	15
3.5.3.Throws Exceptions.....	15
3.6.Function for Getting Latest Discovery Scan Log Report.....	15
3.6.1.Arguments.....	15

3.6.1.1.AuthData type.....	16
3.6.2.Return value - LastedCDLogResponse.....	16
3.6.2.1.ReportRowCDLog.....	16
3.6.2.2.ReportRowCDAgentLog.....	16
3.6.3.Throws Exceptions.....	17
3.7.Utility Function for Getting Short Information about Web Service (name, version, etc.).....	17
3.8.Function for Getting Domains Report.....	17
3.8.1.Arguments.....	17
3.8.2.Return value - DomainReportResponse.....	17
3.8.2.1.ReportRowDomain.....	17
3.8.2.2.Throws Exceptions.....	18
3.9.Function for Getting Device Certificate Report	18
3.9.1.Arguments.....	18
3.9.2.Return value - DeviceCertReportResponse	19
3.9.2.1.ReportRowDeviceCert.....	19
3.9.2.2.Throws Exceptions.....	20
About Comodo.....	21

1. Introduction

Name	: ReportService
Service EPR	: http://cert-manager.com/ws/ReportService OR http://hard.cert-manager.com/ws/ReportService http://cert-manager.com/private/ws/ReportService OR http://hard.cert-manager.com/private/ws/ReportService
View WSDL	: http://cert-manager.com/ws/ReportService?wsdl OR http://hard.cert-manager.com/ws/ReportService?wsdl * http://cert-manager.com/private/ws/ReportService?wsdl OR http://hard.cert-manager.com/private/ws/ReportService?wsdl *
Service Description	: The Service allows the Administrator to get Activity Log Report, Client Certificates Report, SSL Certificates Report, Discovery Scan Log Report, Discovery Scan Detail Report and the Latest Discovery Scan Log Report.

* Please use the sub-domain appropriate to your use case.

2. Authentication

To access CCM APIs, you first need to authenticate yourself to the CCM service. You can authenticate via username/password, or via username + client certificate. The Reports Web Services service uses SOAP protocol.

- [Authentication via Username and Password](#)
- [Authentication via Username and a Client Certificate](#)

2.1. Authentication via Username and Password

Prerequisite

- Users should have CCM login credentials and the correct customer login URI
- For the Web Service API, access must be enabled for the customer by Comodo and for each org/dept by admins on the client side.

The URL for the username/password authentication is: https://<CCM Server>:<port>/ws/ReportService

Parameter	Description
<CCM Server>	The address of the CCM server you use. For example, 'cert-manager.com' or hard.cert-manager.com.
<port>	The default port number is 443.

Example:

https://cert-manager.com:443/ws/ ReportService

Authentication is performed by sending the AuthData parameter to the web service API. This includes the username, password and Customer URI. After successful authentication, the admin can proceed to the CCM management interface. If authentication is not successful (login and/or password are incorrect, password has expired), the admin will see an error and will be denied access to the Reports Web Services API. The same admin could, however, still authenticate themselves via a client certificate (refer to the [next section](#)).

2.2. Authentication via Username and a Client Certificate

Prerequisite

- Admins should have the Customer URI
- For the Web Service API, access must be enabled for the customer by Comodo and for each org/dept by admins on the client side.
- Admins should have 'Certificate Auth' enabled. The authentication certificate must requested and issued via CCM and active at the moment of authentication.

The URLs for the username/client certificate authentication is: `https://<CCM Server>:<port>/private/ws/ReportService`

Parameter	Description
<CCM Server>	The address of the CCM server you use. For example, ' <i>cert-manager.com</i> ' or ' <i>hard.cert-manager.com</i> '.
<port>	The default port number is 443.

Example:

`https://cert-manager.com:443/private/ws/ ReportService`

The certificate must be provided by the admin's client at the time of login. After receiving the authdata parameter (customer URI and username), CCM will verify that the certificate matches the one specified in the 'Certificate Auth' area of the admin's profile. After successful authentication, the admin can proceed to the CCM management interface. If authentication is not successful (username is incorrect, certificate is not correct/revoked), the admin will see an error and will be denied access to the Reports Web Services API. The same admin could, however, still authenticate themselves using the username and password method (see [previous section](#)).

3. Remote Functions

3.1. Function for Getting Activity Report

`ActivityReportResponse getActivityReport(AuthData authData, Date from, Date to)` throws `InvalidAuthException`, `WSRuntimeException`

3.1.1. Arguments

Variable Name	Type	Description
authData	AuthData	Authentication data for access. See section 3.1.1.1.AuthData type for more details.
from	Date	The Start date of Activity log
to	Date	The End date of Activity log

3.1.1.1. AuthData type

Method Name	Description
SetLogin(String value)	Set login name for account within CCM. This is login of the Admin with role 'Master Admin', 'RA Admin' within CCM account.

SetPassword(String value)	Set password for account within CCM. This is password of the Admin with role 'Master Admin', 'RA Admin' within CCM account.
SetURI(String value)	URI for logging into account within Comodo Certificate Manager .

3.1.2. Return value - ActivityReportResponse

ActivityReportResponse - Object that contains get Activity Log Report operation status, message and ReportRowActivity object array if succeed.

Method Name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>
ReportRowActivity[] getReports()	If status code = 0, then ReportRowActivity object array if succeed, empty array otherwise.

3.1.2.1. ReportRow Activity

Name	Type	Description
id	int	Log id
action	WSAction	See section 3.1.2.2.WSAction
admin	WSAdmin	See section 3.1.2.3.WSAdmin
person	WSPerson	See section 3.1.2.4.WSPerson
org	WSOrganization	See section 3.1.2.5.WSOrganization
smime	WSSMIME	See section 3.1.2.6.WSSMIME
ssl	WSSSL	See section 3.1.2.7.WSSSL
notif	WSNotification	See section 3.1.2.8.WSNotification
description	String	Description of action
accessMethod	String	Client access way
Address	String	Client Ip address
date	Date	Log Creation date

3.1.2.2. WSAction

Name	Type	Description
id	int	Action ID number
actionName	String	Action Name

3.1.2.3. WSAdmin

Name	Type	Description
------	------	-------------

Name	Type	Description
login	String	Admin login
fullName	String	Admin full name
email	String	Admin email

3.1.2.4. WSPerson

Name	Type	Description
name	String	Person name
email	String	Person email
guid	String	Object GUID for autoenrollment

3.1.2.5. WSOrganization

Name	Type	Description
name	String	Organization name
department	String	The department of this organization
domain	String	Domain name for this organization
address1	String	Organization's address1
address2	String	Organization's address2
address3	String	Organization's address3

3.1.2.6. WSSMIME

Name	Type	Description
person	WSPerson	See section 3.1.2.4.WSPerson
orderNumber	long	Order number (SASP)
ordered	Date	Ordered date
revoked	Date	Revocation date
collected	Date	Collection date
downloaded	Date	Downloaded date
expires	Date	Expiration date
state	SMIMEState	The status of SMIME
serialNumber	String	Certificate Serial number
subject	String	SMIME subject

3.1.2.7. WSSSL

Name	Type	Description
orderNumber	long	Order_number returned by CA when applied with CA
commonName	String	SSL common name
sslType	String	Cert Type that this ssl belongs to
term	int	Certificate term(years)

3.1.2.8. WSNotification

Name	Type	Description
description	String	Notification description

3.1.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;

3.2. Function for Getting Client Certificates Report

`ClientCertReportResponse getClientCertReport(AuthData authData, Date from, Date to, String organizationNames, String certificateStatus, String certificateDate)` throws `InvalidAuthException`, `CheckParamException`, `WSRuntimeException`

3.2.1. Arguments

Variable Name	Type	Allowed Values	Description
authData	AuthData		Authentication data for access. See section 3.2.1.1.AuthData type .
from	Date		The Start date of Activity log
to	Date		The End date of Activity log
organizationNames	String		organization names split by “,”
certificateStatus	String	0 = Any 1 = Requested	Current Status value

		2 = Enrolled - Downloaded 3 = Revoked 4 = Expired 5 = Enrolled - Pending Download 6 = Not Enrolled	
certificateDate	String	0 = Enrolled Date 1 = Downloaded Date 2 = Revoked Date 3 = Expire Date 4 = Requested Date 5 = Issued Date	Date Selection value

3.2.1.1. AuthData type

Method Name	Description
setLogin(String value)	Set login name for account within CCM. This is login of the Admin with role 'Master Admin', 'Client Cert Admin' within CCM account.
setPassword(String value)	Set password for account within CCM. This is password of the Admin with role 'Master Admin', 'Client Cert Admin' within CCM account.
setURI(String value)	URI for logging into account within CCM.

3.2.2. Return value - ClientCertReportResponse

ClientCertReportResponse - Object that contains get Client Certificates Report operation status, message and ReportRowClientCert object array if succeed.

Method Name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>
ReportRowClientCert[] getReports()	If status code = 0, then ReportRowClientCert object array if succeed, empty array otherwise.

3.2.2.1. ReportRowClientCert

Name	Type	Description
id	int	SMIME id
person	WSPerson	See section 3.1.2.4.WSPerson
organization	WSOrganization	See section 3.1.2.5.WSOrganization
subject	String	SMIME subject

email	String	Person email
orderNumber	long	Order number (SASP)
enrolled	Date	Collection date
downloaded	Date	Downloaded date
revoked	Date	Revocation date
expire	Date	Expiration date
enrollType	String	Enroll from WEB-UI(1), API Enroll(2), auto enroll from Microsoft Exchange(3)

3.2.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;
CheckParamException	code: -103 = The type of certificate status is invalid; -104 = The date of certificate is invalid;

3.3. Function for Getting SSL Certificates Report

`SSLReportResponse getSSLReport(AuthData authData, Date from, Date to, String organizationNames, String certificateStatus, String certificateDate)` throws `InvalidAuthException`, `CheckParamException`, `WSRuntimeException`

3.3.1. Arguments

Variable Name	Type	Allowed Values	Description
authData	AuthData		Authentication data for access. See section 3.3.1.1.AuthData type .
from	Date		The Start date of Activity log
to	Date		The End date of Activity log
organizationNames	String		organization names split by “,”
certificateStatus	String	0 = Any 1 = Requested 2 = Enrolled - Downloaded 3 = Revoked	Current Status value

		4 = Expired 5 = Enrolled - Pending Download 6 = Not Enrolled	
certificateDate	String	0 = Enrolled Date 1 = Downloaded Date 2 = Revoked Date 3 = Expire Date 4 = Requested Date 5 = Issued Date	Date Selection value

3.3.1.1. AuthData type

Method Name	Description
setLogin(String value)	Set login name for account within CCM. This is login of the Admin with role 'Master Admin', 'RA Admin', 'SSL Admin', 'Signer/Approver' within CCM account.
setPassword(String value)	Set password for account within CCM. This is password of the Admin with role 'Master Admin', 'RA Admin', 'SSL Admin', 'Signer/Approver' within CCM account.
setURI(String value)	URI for logging into account within CCM.

3.3.2. Return value - SSLReportResponse

SSLReportResponse - Object that contains get SSL Certificates Report operation status, message and ReportRowSSL object array if succeed.

Method name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>
ReportRowSSL[] getReports()	If status code = 0, then ReportRowSSL object array if succeed, empty array otherwise.

3.3.2.1. ReportRowSSL

Name	Type	Description
id	int	SSL id
type	String	Cert Type that this ssl belongs to
commonName	String	SSLs common name
subject	String	Subject Alternative Names
status	String	Current state
requester	String	Person requester
approver	WSAdmin	See 3.1.2.3.WSAdmin

organization	WSOrganization	See 3.1.2.5.WSOrganization
orderNumber	long	Order_number returned by CA when applied with CA
servers	int	Servers count
serverType	String	Server type
term	int	Certificate term(years)
comments	String	Comment of this ssl
requested	Date	Requested date
approved	Date	Approved by client admin or super admin date
issued	Date	Collected from CA date
downloaded	Date	User downloaded date
expires	Date	Expiration date
revoked	Date	Revocation date if revoked
replaced	Date	Replaced date if replaced

3.3.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;
CheckParamException	code: -103 = The type of certificate status is invalid; -104 = The date of certificate is invalid;

3.4. Function for Getting Discovery Scan Log Report

`DiscoveryReportResponse getDiscoveryReport (AuthData authData, Date from, Date to, Integer cdAuditLogId, String agentIds, String orgIds)` throws `InvalidAuthException`, `CheckParamException`, `WSRuntimeException`

3.4.1. Arguments

Variable Name	Type	Description
authData	AuthData	Authentication data for access. See section 3.3.1.1.AuthData type .
from	Date	The Start date of Activity log

to	Date	The End date of Activity log
cdAuditLogId	Integer	not use, should be 0
agentIds	String	CD Agent ids split by “,”
orgIds	Strings	The list of organization ids comma separated that filters the report by specified organizations.

3.4.2. Return value - DiscoveryReportResponse

DiscoveryReportResponse - object that contains get Discovery Scan Log Report operation status, message and ReportRowDiscovery object array if succeed.

Method Name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>
ReportRowDiscovery[] getReports()	If status code = 0, then ReportRowDiscovery object array if succeed, empty array otherwise.

3.4.2.1. ReportRowDiscovery

Name	Type	Description
id	int	cd_log id
startDate	Date	Start date
endDate	Date	End date
ipsScanned	int	IPs scanned
sslsFound	int	SSLs found
newSslsFound	int	New SSLs found
ccmCertsFound	int	CCM certificates found
newCcmCertsFound	int	New CCM certificates found
otherFound	int	Other found
newOtherFound	int	New other found
selfSignedFound	int	Self-signed found
newSelfSignedFound	int	New self-signed found
scanType	String	Scan Type
completionStatus	String	Completion Status
failReason	String	Fail Reason
requestedBy	String	Requested by

canceledBy	String	Canceled by
cancelReason	String	Cancel Reason
settings	String	Settings

3.4.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;

3.5. Function for Getting Discovery Scan Detail Report

DiscoveryDetailReportResponse getDiscoveryDetailReport (AuthData authData, Date from, Date to, Integer cdAuditLogId, String agentIds, String orgIds) throws InvalidAuthException, CheckParamException, WSRuntimeException

3.5.1. Arguments

Variable Name	Type	Description
authData	AuthData	Authentication data for access. See section 3.3.1.1.AuthData type .
from	Date	The Start date of Activity log
to	Date	The End date of Activity log
cdAuditLogId	Integer	CD AuditLog Id which you want to get details
agentIds	String	CD Agent ids split by “,”
orgIds	String	The list of organization ids comma separated that filters the report specified by organizations.

3.5.2. Return value - DiscoveryDetailReportResponse

DiscoveryDetailReportResponse - object that contains get Discovery Scan Detail Report operation status, message and ReportRowDiscoveryDetail object array if succeed.

Method Name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>

ReportRowDiscoveryDetail[] getReports()	If status code = 0, then ReportRowDiscoveryDetail object array if succeed, empty array otherwise.

3.5.2.1. ReportRowDiscoveryDetail

Name	Type	Description
foundTime	Date	Date and Time found
commonName	String	Common Name
vendor	String	Vendor
issuedBy	String	Issued By
ipAddress	String	IP Address:Port
term	int	Term (years)
expires	Date	Expires
serialNumber	String	Serial Number
cdAgent	String	CD Agent name

3.5.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;

3.6. Function for Getting Latest Discovery Scan Log Report

LastedCDLogResponse getLatestCDLog(AuthData authData, String agentNames) throws InvalidAuthException, WSRuntimeException

3.6.1. Arguments

Variable Name	Type	Max. Length (chars)	Description
authData	AuthData		Authentication data for access. See section 3.6.1.1.AuthData type .
agentNames	String		CD Agent Name

3.6.1.1. AuthData type

Method Name	Description
setLogin(String value)	Set login name for account within CCM. This is login of the Admin within CCM account.
setPassword(String value)	Set password for account within CCM. This is password of the Admin within CCM account.
setURI(String value)	URI for logging into account within CCM.

3.6.2. Return value - LastedCDLogResponse

LastedCDLogResponse - Object that contains get Latest Discovery Scan Log Report operation status, message and ReportRowCDLog object array if succeed.

Method Name	Possible value(s)
int getStatusCode()	0 = SUCCESSFUL;
String getMessage()	<i>null</i>
ReportRowCDLog[] getReports()	If status code = 0, then ReportRowCDLog object array if succeed, empty array otherwise.

3.6.2.1. ReportRowCDLog

Name	Type	Description
id	int	cd_log id
requestor	WSAdmin	See section 3.1.2.3.WSAdmin
canceller	WSAdmin	See section 3.1.2.3.WSAdmin
cancelReason	String	Cancel reason
requestorSA	WSAdmin	See section 3.1.2.3.WSAdmin
cancellerSA	WSAdmin	See section 3.1.2.3.WSAdmin
created	Date	Create Date
settings	String	settings
cdAgents	WSCDAgent[]	See section 3.6.2.2.ReportRowCDAgentLog

3.6.2.2. ReportRowCDAgentLog

Name	Type	Description
id	int	Cd Agent id
name	String	Cd Agent name

3.6.3. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid;

3.7. Utility Function for Getting Short Information about Web Service (name, version, etc.).

`String getWebServiceInfo()`

3.8. Function for Getting Domains Report

`DomainReportResponse getDomainReport(AuthData authData)`

3.8.1. Arguments

Variable Name	Type	Description
authData	AuthData	Authentication data for access. See section 3.6.1.1.AuthData type

3.8.2. Return value - DomainReportResponse

DomainReportResponse - object that contains get Domains Report operation status, message and ReportRowDomain object array if succeed.

Method Name	Possible values(s)
<code>int getStatusCode()</code>	0=SUCCESSFUL;
<code>String getMessage()</code>	null
<code>ReportRowDomain[] reportRowDomains</code>	If status code=0, then ReportRowDomain object array is succeed, empty array otherwise

3.8.2.1. ReportRowDomain

Name	Type	Description
id	int	Domain Id

name	String	Domain name
status	String	Domain status
requested	Date	Domain requested date
dcvState	String	Domain DCV state
stickyUntill	Date	Domain sticky until date
dcvMethod	String	Domain DCV method

3.8.2.2. Throws Exceptions

Name	Description
WSRuntimeException	code: -14 = An unknown error occurred!;
InvalidAuthException	code: -100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service;

3.9. Function for Getting Device Certificate Report

`getDeviceCertReport (AuthData authData, Date from, Date to, String certificateStatus, String certificateDate)`

3.9.1. Arguments

Parameter	Type	Description
authData	AuthData	Authentication data for access. See section 3.6.1.1.AuthData type .
from	Date	The Start date of Activity log.
to	Date	The End date of Activity log.
organizationNames	String	Organization names separated by ','. In case of department, use [Organization]/[Department] mask.
certificateStatus	String	The status of the certificate. Use the following values: 0 = Any; 1 = Requested;

		2 = Enrolled, Downloaded; 3 = Revoked; 4 = Expired; 5 = Enrolled, Pending Download; 6 = Not Enrolled.
certificateDate	String	Date which should be used for check, use the following values: 0 = Enrolled Date; 1 = Downloaded Date; 2 = Revoked Date; 3 = Expire Date; 4 = Requested Date; 5 = Issued Date.

3.9.2. Return value - DeviceCertReportResponse

DeviceCertReportResponse - Generated report object that contains get Device Certificate Report operation status, message and ReportRowDeviceCert object array if succeed.

Method Name	Possible values(s)
int getStatusCode()	0=SUCCESSFUL;
String getMessage()	null
ReportRowDeviceCert[] deviceCertsReports	If status code=0, then ReportRowDeviceCert object array is succeed, empty array otherwise

3.9.2.1. ReportRowDeviceCert

Name	Type	Description
id	int	Device Certificate Id
commonName	String	Common Name
organization	WSOrganization	See section 3.1.2.5.WSOrganization
subject	String	Subject Name
email	String	E-mail
city	String	City
state	String	State
country	String	Country
orderNumber	long	Order Number

serialNumber	String	Serial Number
cald	int	CA Identifier
caName	String	CA Name
certTypeName	String	Device Certificate Type Name
keyUsage	String	Key Usages
extendedKeyUsage	String	Extended Key Usages
enrolled	Date	Certificate enrollment date
downloaded	Date	Certificate downloaded date
revoked	Date	Certificate revocation date
expire	Date	Certificate expiration date
enrollType	String	Certificate enrollment type
keySize	int	Key Size
keyAlgorithm	String	Key Algorithm
signatureAlgorithm	String	Signature Algorithm

3.9.2.2. Throws Exceptions

Method Name	Description
WSRuntimeException int getCode()	-14 = An unknown error occurred.
InvalidAuthException int getCode()	-100 = The URI of customer is invalid; -101 = The client admin is invalid; -102 = You are not authorized to execute get report service.
CheckParamException int getCode()	-103 = The type of certificate status is invalid; -104 = The date of certificate is invalid.

About Comodo

The Comodo organization is a global innovator of cybersecurity solutions, protecting critical information across the digital landscape. Building on its unique position as the world's largest certificate authority, Comodo authenticates, validates and secures networks and infrastructures from individuals to mid-sized companies to the world's largest enterprises. Comodo provides complete end-to-end security solutions across the boundary, internal network and endpoint with innovative technologies solving the most advanced malware threats, both known and unknown. With global headquarters in Clifton, New Jersey, and branch offices in Silicon Valley, Comodo has international offices in China, India, the Philippines, Romania, Turkey, Ukraine and the United Kingdom. For more information, visit comodo.com.

Comodo CA Limited

3rd Floor, 26 Office Village, Exchange Quay, Trafford
Road, Salford, Greater Manchester M5 3EQ,

United Kingdom.

Tel : +44 (0) 161 874 7070

Fax : +44 (0) 161 877 1767

Email: EnterpriseSolutions@Comodo.com

Comodo Security Solutions, Inc.

1255 Broad Street

Clifton, NJ 07013

United States

Tel: +1.877.712.1309

Tel: +1.703.637.9361

For additional information on Comodo - visit <http://www.comodo.com>.