

Napera Networks

Napera Selects GlobalSign EmbeddedSSL to Secure Network Access Control Solution

Napera
www.napera.com



In Partnership With
GlobalSign
www.globalsign.com



Industry
Technology Devices

Results
Napera's network access control technology with GlobalSign's SSL Certificates allows users to control and enforce device health, identity and network access safely and securely providing visibility and real time reporting of the security state of the computers and network.

In February 2008, Napera began a pilot program to become one of the first companies to utilize a valid, fully vetted X509 digital certificate for networking gear managed via HTTPS.

The products, the Napera N24 and N24S network appliances, utilize a Web-based management service for reporting, logging, alerts, and back-up services.

By utilizing GlobalSign's highly ubiquitous SSL Certificates, Napera has leveraged widely trusted security methods for its solution, which ensures only healthy computers and authorized users access the corporate network and enables controlled guest access to the Internet or printers. Napera built its solution for the small and medium-enterprise to deliver enterprise-class network access control with ease of management and affordability. Ensuring the highest levels of security without complexity is a key focus for Napera, which is why the GlobalSign solution fit its needs perfectly.

Utilizing trusted methods to secure new products

In a ground-breaking move for the network security industry, Napera has become one of the first companies to utilize a valid, fully vetted X509 digital certificate for networking gear managed via HTTPS (Hyper Text Transport Protocol Secure). Through HTTPS, network managers can securely and seamlessly access the embedded Web-based management service of Napera's innovative network access control appliance.

The Product

Napera's network access control solution includes an appliance and a Web-based management service for logging, reporting and alerts, called MyNapera.com. The Napera N24 appliance works with MyNapera.com to ensure users are authorized, computers are healthy, and the network is secure. The Napera N24 is a comprehensive solution that combines controlled guest and employee access, computer health enforcement for Windows and Mac systems, identity enforcement, and increased security for wired and wireless environments.

- Deploys in 10 minutes
- Easy to use and manage
- Gigabit performance
- Leverages Microsoft Network Access Protection

Napera is using GlobalSign's proven SSL technology with the new comprehensive Managed Service Interface, as well as taking advantage of the flexible API provided by GlobalSign to import SSL Certificates onto the Napera N24 appliance. By issuing certificates to a fully qualified domain name which is unique to each device, Napera quickly and efficiently piloted a program to manufacture SSL Certificates onto their devices, becoming one of the first network security companies in history to embed a valid server certificate in networking gear managed via HTTPS. The server certificate identifies both the device and Napera as an organization which also offers the guarantee to the user that the correct box is addressed and that the connection is encrypted.

"Companies want to treat their guests well, and that sometimes means giving them Internet access. However, letting them plug into your network can be an enormous security risk. Network access control technology helps strike the right balance. Guest access has become one of the challenges IT must face, as it attempts to balance security with worker productivity. This is especially true amid periods of economic downturn, when companies rely more on outsourcing and contractors to get work done than on hiring new employees".

Todd Hooper
CEO Napera Networks
(Technewsworld.com
7/16/08)

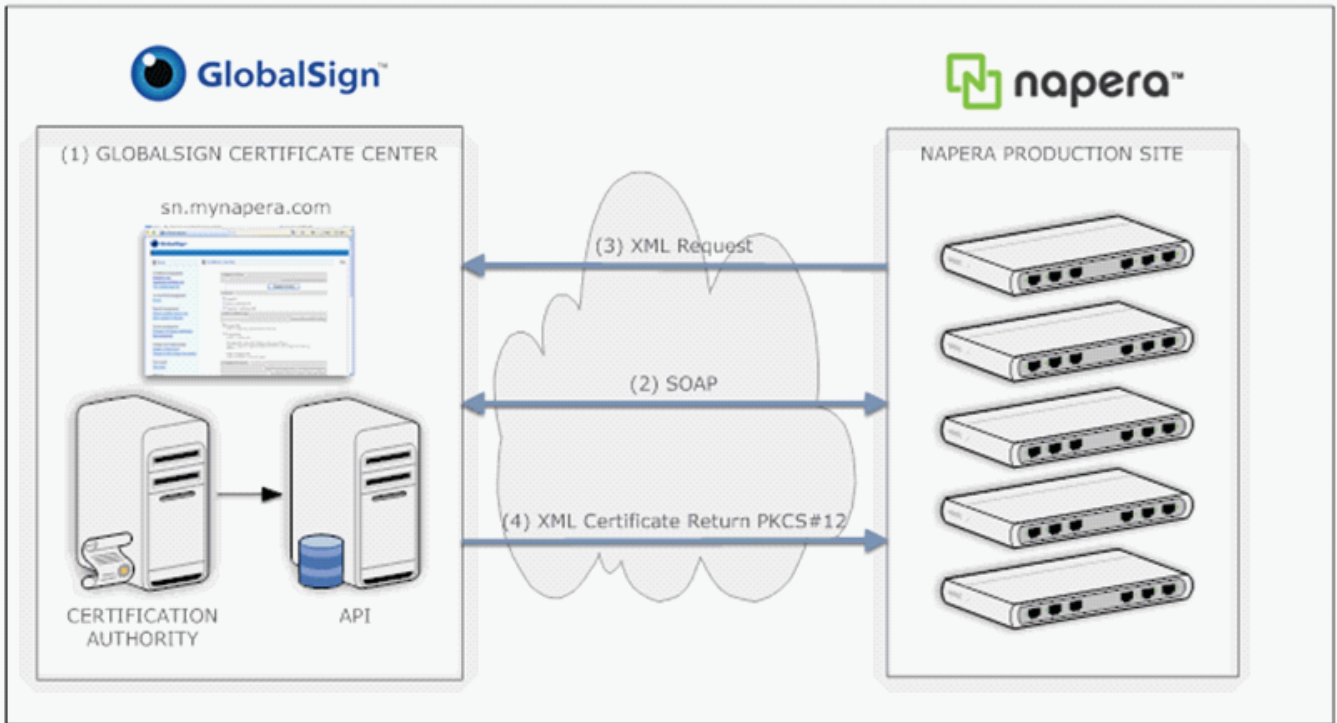


Challenges

- Allowing users to safely and securely access their control panel remotely or onsite without compromising network security.
- Provide SSL Certificates to customers who may not have an internal CA or process in place to procure SSL Certificates for their devices.
- Conditioning of end users and system administrators to "click through" certificate warnings presented by self signed certificates or from un-trusted Certificate Authorities. (A lot of security appliances using HTTPS rely on self signed Certificates that condition administrators to "click through" warnings).

Solutions

- Utilize the known and proven technology of GlobalSign's SSL Certificates that are inherently trusted by all internet browsers and most mobile devices.
- By leveraging existing investments Napera's customers do not have to obtain their own Certificates.
- By using SSL Certificates from a trusted Certificate Authority the N24 network devices inherit the trust and ubiquity provided by such certificates therefore reinforcing the correct use of SSL with end users and System Administrators.
- Napera's network access control technology with GlobalSign's SSL Certificates allows users to control and enforce device health, identity and network access safely and securely providing visibility and real time reporting of the security state of the computers and network.



(1) Certificate Management Portal

GlobalSign Certificate Center (GCC) is a SaaS platform which allows service access either through a Web-based portal or in Napera's case an automated API. Napera submits an appropriately formatted certificate request online via an approved API (Application Programming Interface) to GlobalSign. Upon verification of identity utilizing the pre-vetted domain mynapera.com, GlobalSign either directly or via the API issues the certificate or sends the certificate to the e-mail address from which the certificate application originated. Organizationally Validated Certificates are issued immediately utilizing the pre-vetted domain mynapera.com.

GlobalSign verifies the submitted information by checking domain ownership or domain right to use and any other information as appropriate. This may also include checks in third party databases or resources, against standard bodies, such as the Internet Engineering Task Force (IETF) or the Internet Corporation for Assigned Names and Numbers (ICANN), and through independent verification via telephone.

(2) API Communication

The Application Programming Interface (API) allows for communication between Napera's manufacturing systems and the GCC to apply for, generate, send, receive and install the Organizationally Validated SSL Certificate onto the Napera N24 and N24S appliances.

(4) Private Key Code Sample

```
Private-Key: (2048 bit)
modulus:
 00:dd:3c:f6:9a:be:d2:66:20:0c:7d:0c:ae
 cc:f4:e8:89:8d:16:b3:5c:16:75:06:33:f9
 d6:9b:f4:6b:e7:4d:0f:44:af:8b:87:dc:79
 e8:e4:20:19:df:f0:0d:04:4d:2c:4c:ad:19
 8c:6a:4d:a6:d6:0e:e8:ae:e2:37:75:8d:d5
 31:15:3c:f4:4d:ad:5d:f8:d0:23:c2:72:de
 9b:ef:f7:84:25:b0:cf:92:4d:39:4a:18:41
 81:28:ac:5b:f2:7d:74:e2:8f:f9:a7:c1:c0
 dd:cd:b1:4c:23:23:63:27:30:4c:da:8e:72
 77:c2:22:e2:b4:43:bb:9d:ca:36:59:fc:98
 da:c4:2c:34:03:0c:e5:91:51:e2:23:20:ae
 30:8f:9e:f5:a5:2c:e4:bf:ab:2f:fb:82:03
 ff:5e:90:a8:f0:be:b0:4d:aa:f3:af:2c:27
 7e:7a:d2:c3:e8:5b:53:8d:86:db:ae:f6:7c
 35:b6:52:9d:a0:c1:e0:da:ac:6b:68:05:7e
 41:62:63:56:b3:47:6e:11:d8:d4:6c:92:be
 f2:a5:72:3d:4e:d9:d2:e2:8d:42:92:3e:cf
 63:89
publicExponent: 65537 (0x10001)
privateExponent:
 5c:a2:77:1b:6a:45:0c:af:e4:aa:c3:91:b2
 ea:ec:27:14:25:6a:2a:67:d8:ce:25:1a:e4
 f2:31:10:b1:43:c9:dd:d7:a7:13:d7:14:21
 15:27:ff:cd:8d:64:d5:e5:3e:64:48:a2:95
 3f:75:8e:22:d9:11:42:90:c3:e9:fb:de:3d
 d4:db:b5:eb:84:68:f1:92:ad:36:71:04:b4
```

(3) Sample API Code

```
<?php
require_once 'SOAP/Client.php';
$url = 'http://xxx.globalsign.com/services/GasOrder';
$nameSpace = 'http://xxx.globalsign.com';
class Order {
    var $client;
    var $nameSpace;
    function Order($url,$nameSpace) {
        $this->client = new SOAP_Client($url);
        $this->client->_namespace = $nameSpace;
    }
    function PVOrder($request) {
        $res = $this->client->call('PVOrder',$request,$this->nameSpace);
        return $res;
    }
}
$rek = new Order($url,$nameSpace);
$req['Request']['OrderRequestHeader']['AuthToken']['UserName'] = "";
$req['Request']['OrderRequestHeader']['AuthToken']['Password'] = "";
$req['Request']['OrderParameter']['ProductCode'] = "OV";
$req['Request']['OrderParameter']['OrderKind'] = "new";
$req['Request']['OrderParameter']['Licenses'] = "1";
$req['Request']['OrderParameter']['ValidityPeriod']['Months'] = "12";
$req['Request']['OrderParameter']['CSR'] = ""

-----BEGIN CERTIFICATE REQUEST-----
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
-----END CERTIFICATE REQUEST-----";
$req['Request']['ContactInfo']['FirstName'] = "xxxx";
$req['Request']['ContactInfo']['LastName'] = "yyyy";
$req['Request']['ContactInfo']['Phone'] = "55555";
$req['Request']['ContactInfo']['Email'] =
"admin@test.com";
$res = $rek->PVOrder( $req );
print_r($res);
?>
```

Napera utilizes the known and proven technology of GlobalSign's SSL Certificates in three main scenarios:

1. Because GlobalSign Certificates are inherently trusted by all Internet browsers, Napera uses them to ensure users are safely and securely accessing the MyNapera.com Web-based management service either remotely or onsite.
2. The GlobalSign certificates ensure increased security when a wireless access point (WAP) is authenticating against the Napera N24 as part of a wireless network access control infrastructure.
3. The GlobalSign Certificates are leveraged when endpoint devices, such as laptops, are using 802.1x to authenticate against the Napera N24 during network access.

By embedding the certificate technology, Napera has provided SSL Certificates to customers who may not have an internal Certificate Authority (CA) or process in place to procure SSL Certificates. These trusted SSL Certificates help reinforce the proper use of SSL Certificates with end users and system administrators by preventing users from "clicking through" Certificate warnings that are presented by self-signed Certificates. Many security appliances that rely on HTTPS connections rely on self-signed Certificates, therefore conditioning system administrators and end users to "click through" warning messages.

Napera's network access control technology with GlobalSign's SSL Certificates allows users to control and enforce device health, identity and network access safely and securely.

Advantages of a browser-based user interface utilizing SSL security

Shipping each Napera N24 with a fully validated and publicly trusted X509 digital certificate offers many security benefits to Napera's customers. No other type of security for the N24 and N24S devices were considered to solve this specific challenge due to the unique software as a service model Napera uses. With this browser-based service, Napera always uses a secure HTTPS connection for administration.

The GlobalSign Difference:

After speaking to multiple SSL Certificate Authorities and vendors, Napera chose GlobalSign because of its willingness to offer flexible solutions, such as a workable SOAP API to embed SSL Certificates with Napera's network appliances. GlobalSign worked closely with Napera where other vendors would not proceed in discussions unless certificates were ordered up front and in very large quantities.

"GlobalSign provided us with a flexible and usable SOAP API that integrated seamlessly into our manufacturing process, allowing us to order Certificates using a pre-vetted domain preceded by a serial number," said Chris Boscolo, founder and CTO of Napera Networks. "No one else would work with us on that level to provide the cutting-edge security we needed for our solution."

"With the mobility and security messages that both GlobalSign and Napera are sending, the partnership simply makes sense" commented Johan Sys, CEO of GlobalSign, Inc. "We are pleased to be able to help Napera secure its network appliances with our highly ubiquitous SSL Certificates. Their commitment to security, and focus on what they do best, will prove to be a mutually beneficial partnership, now and in the future".

For More Information

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