

=  
TESTING



## EuroDOCSIS BPI+ Requirements

--- Project Reference ---

Document Reference : EuroDOCSIS.BPI+Req.pdf

Revision : 7.0

Author(s) : testing@excentis.com

Date : October 23, 2007

Distribution : www.excentis.com

# 1 Introduction

While EuroDOCSIS 1.1 uses the BaseLine Privacy Plus specification from DOCSIS® 1.1, some changes are needed in relation to the digital certificates that are used in a EuroDOCSIS 1.1 environment. This document outlines these differences and specifies the structure and required information needed for EuroDOCSIS 1.1 certificates. To keep EuroDOCSIS 1.1 and DOCSIS® 1.1 as much alike as possible, EuroDOCSIS 1.1 uses all DOCSIS® 1.1 BPI+ technology, including new revisions of the BPI+ specification.

This document describes the structure of the EuroDOCSIS Root Certificate and EuroDOCSIS Manufacturer certificate. For EuroDOCSIS 1.1 the EuroDOCSIS Root CA is the only valid CA, it is clear to the reader that any requirements that are stated in latest BPI+ specification for DOCSIS® 1.1 which refer to the DOCSIS® Root Certificate or DOCSIS® Manufacturer Certificate are changed to the corresponding requirement for the EuroDOCSIS Root Certificate respectively the EuroDOCSIS Manufacturer Certificate.

EuroDOCSIS 1.1 compliant cable modems MUST have the EuroDOCSIS Root CA's public key stored in the CM's non-volatile memory instead of the DOCSIS® Root CA's public key. The EuroDOCSIS Root CA's public key is the key that MUST be used to validate CVCs.

The EuroDOCSIS certificate details can be found in the following chapters.

Note:

- for EuroDOCSIS 2.0 the same requirements apply: the latest BPI+ specification for DOCSIS® 2.0 is applicable, except for the aforementioned differences.
- for EuroDOCSIS 3.0 the same requirements apply: the latest SEC specification for DOCSIS® 3.0 is applicable, except for the aforementioned differences.



## 2 EuroDOCSIS Root Certificate

The EuroDOCSIS Root Certificate has the following attributes:

countryName=BE  
organizationName=tComLabs – Euro-DOCSIS  
organizationalUnitName=Cable Modems  
commonName= Euro-DOCSIS Cable Modem Root CA

The countryName, organizationName, organizationalUnitName and commonName attributes MUST be included and MUST have the values shown. Other attributes are not allowed and MUST NOT be included.

## 3 EuroDOCSIS Manufacturer Certificate

A valid EuroDOCSIS Manufacturer certificate has the following attributes:

countryName=<Country of Manufacturer>  
[stateOrProvinceName=<state/province>]  
[localityName=<City>]  
organizationName=<Company Name>  
organizationalUnitName=<See further>  
[organizationalUnitName=<Manufacturing Location>]  
commonName=<Company Name> Cable Modem Root Certificate Authority

The countryName, organizationName, and commonName attributes MUST be included and MUST have the values shown. The organizationalUnitName having the value "DOCSIS" or "Euro-DOCSIS" MUST be included, its value SHOULD be "Euro-DOCSIS", if the value is not "Euro-DOCSIS" the value MUST be "DOCSIS".



## 4 EuroDOCSIS Code Verification Certificate

A valid EuroDOCSIS Code Verification Certificate is identical to the CVC certificate defined in latest BPI+ specification with the following exceptions:

The ISSUER has to be the EuroDOCSIS Root CA, which has the following attributes:

countryName = BE  
organizationName = tComLabs – Euro-DOCSIS  
organizationUnitName = Cable Modems  
commonName = Euro-DOCSIS Cable Modem Root CA

The SUBJECT of the CVC MUST have the following attributes:

countryName = <country>  
organizationName = <Manufacturer organizationName from CA Certificate>  
organizationalUnitName = Euro-DOCSIS  
commonName = Code Verification Certificate



## 5 EuroDOCSIS Co-signer Code Verification Certificate

A valid EuroDOCSIS Co-signer Code Verification Certificate is identical to the Co-signer CVC certificate defined in latest BPI+ specification with the following exceptions:

The ISSUER has to be the EuroDOCSIS Root CA, which has the following attributes:

countryName = BE  
organizationName = tComLabs – Euro-DOCSIS  
organizationUnitName = Cable Modems  
commonName = Euro-DOCSIS Cable Modem Root CA

The SUBJECT of the Co-signer CVC MUST have the following attributes:

countryName = <country>  
organizationName = <Unique identifier assigned by Euro-DOCSIS>  
organizationalUnitName = Euro-DOCSIS  
commonName = Code Verification Certificate



## 6 References

Latest BPI+ specification can be downloaded from: <http://www.cablemodem.com/specifications/>

