

# **TeleTrust EBCA**

*European Bridge Certificate Authority*

## Frequently Asked Questions (FAQ)

of all interested parties in the  
TeleTrust European Bridge CA

## Information about this document

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## History

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## What is the EBCA?

The TeleTrusT European Bridge CA (EBCA) is a consolidation of individual, equal Public Key Infrastructures (PKIs) in a PKI network of trust. It enables secure and authentic communication between businesses, institutions and public authorities.

## Why should one become a participant?

In addition to your PKI, a secure and internal communication between employees, partners, and customers of your organization has been enabled. Benefit from the EBCA in order to communicate securely outside your organization on a central and simple way.

## How does the European Bridge CA simplify external communication?

The EBCA responds to three recurring issues of corporate PKIs.

### 1. Trust (organizational)

Corporate PKIs chain up to a self-signed root certificate. In contrast to certificates of public trust centers, these root certificates have not been classified as trustworthy among your communication partners. Before you can communicate securely with each other, you need to build mutual trust. Therefore communication partners commonly verify whether the PKI is operated securely and make sure that the certificates issued in the PKI are tamper-proof and up to date. The standards that are the basis for a secure PKI are, in most cases, specified to be obligatory in a Certificate Policy. The communication partners, therefore, have to mutually verify and accept their policies.

Participants of the European Bridge CA fulfill minimum standards that are laid down in a common Certificate Policy. Therefore it is safe to trust other EBCA participants without conducting additional examinations. If you would like to work with a new and different communication partner, this partner can trust the security of your PKI and must verify the standards of the EBCA only once, no matter how many other EBCA participants the person intends to establish a secure communication with.

### 2. Trust (technical)

If the communication partner has classified your PKI as trustworthy, the root certificate in the IT system has to be implemented as trustworthy. To ensure that the root certificate has not been manipulated during transmission, it must be transferred in two ways, e.g. by eMail and post. This can be quite complicated and time-consuming.

Participants of the European Bridge CA must only pass on their root certificate to the EBCA one time. The EBCA verifies the root certificate and provides it centrally with all other root certificates of the participants on the Internet. In order to exclude manipulation, the list of root certificates is signed with the EBCA certificate. Communication partners are able to access this central list to review the integrity online.

### 3. Accessibility (technical)

The communication partner now trusts your PKI and the current root certificate. For instance, the person would like to send encrypted information to you, therefore the partner requires your public key. To be able to retrieve this public key, the person must integrate your public Directory Service first. If your communication partner has other partners with their own PKI and external Directory Service, there can be many different Directory Services which need to be integrated and maintained. Furthermore, it is not clear how the Directory Service is addressed. Quickly, a high load due to the different configurations on the partners' website will occur on your external Directory Service.

Participants of the European Bridge CA can connect their external Directory Service to the central Directory Service of the European Bridge CA. The Directory Service is operated professionally and has very high availability. Furthermore, there are different security measures implemented that guarantee a secure and resource-saving access to the Directory Service. Communication partners of the EBCA only have to integrate the central Directory Service. This is quite independent of changes in individual participating organizations. Instruction and help are provided centrally.

## What are the benefits of the EBCA over conventional and existing solutions?

You are possibly already using a service that makes your Directory Service externally available and is able to access and store certificates of your communication partners. However, you must build and maintain the organizational and technical trust yourself.

With the European Bridge CA it is possible to restore trust without additional examination effort, since you are part of a network of trust. Use your existing service for technical connection to the EBCA (Directory Service and trustworthy list of root certificates).

However, as an EBCA participant only you are automatically connected to other EBCA participants and partners. By participating in the EBCA your public certificates are automatically retrieved via the EBCA Directory Service by the following groups below:

- EBCA participants, in the industrial sector, banks, public authorities, trust centers, energy industry, auditing service etc.
- Communication partners of the EBCA participants of all sectors and enterprise sizes.
- Technology partner of the EBCA, e.g. eMail gateway provider, with thousands of installations that EBCA participants automatically trust in. The connected Directory Services are automatically addressed when communicating with EBCA participants.

Since the above mentioned interest groups reach you from the very beginning, participating in the EBCA helps to secure communication and simplifies the use of certificates for others.

That implies that the EBCA particularly address the point that cannot be influenced with already existing solutions: The implementation and maintenance of the service on your partner's side. This will reduce obstacles of secure communication on your partner's side, due to the fact that they only have to make one single configuration for multiple communication partners.

Find out more about the EBCA Directory Service here:

<https://www.ebca.de/en/utilisation-of-the-ebca/finding-certificates/>

## What does the EBCA offer beyond its technical services?

The TeleTrusT European Bridge CA is a project of the IT Security Association Germany and constitutes a recognized network of PKI experts. Therefore the participants of the EBCA are regarded as operators of secure PKIs. Together with the EBCA they create a common voice for the promotion of an infrastructure for trustworthy, electronic communication. Furthermore, the EBCA serves the purpose of the exchange of experiences in the construction and the operation of PKIs.

The EBCA consists of participating organizations (enterprises, public authorities and institutions) and is controlled by a steering committee (EBCA board). The operation is run by the participating organizations and TeleTrusT. The EBCA provides pragmatic solutions, independent of platform and manufacturer. Thereby it orients itself towards future-proof, sustainable standards, particularly with regard to interoperability. Currently, a model is being developed by the EBCA to enable the maintenance and re-establishment of relationship of trust towards communication partners.

## What are the costs for a participation in the EBCA?

Find out more about corresponding costs in financial assignments. All costs of participation are covered by means of subscription. The EBCA is a non-profit association.

## How can I contact the EBCA?

For further questions please contact TeleTrusT – IT Security Association Germany directly and address Marieke Petersohn, Phone: +49 30 400 54 308, e-mail: [info@ebca.de](mailto:info@ebca.de).