

WWPass®

PKI Requirements

Overview

Any smart card deployment requires a public key infrastructure (PKI) to manage the certificates that provide the public keys used for encryption. A minimum Microsoft PKI configuration is provided by a pair of certificate authority (CA) servers. This document describes the requirements for deploying Microsoft PKI. WWPass smart card technology, as with any smart card solution, requires a PKI deployment.

Two servers are required for a properly functional Microsoft PKI: a Certificate Authority, also known as a Root CA, and a Registration Authority, known in a Microsoft PKI as a subordinate CA.

Certificate Authority (CA)

Microsoft describes the Certificate Authority as a server that “acts as the root of trust in a public key infrastructure and provides services that authenticate the identity of individuals, computers, and other entities in a network.” Because this server’s only job is to generate a root certificate for PKI and to sign intermediate certificates for the issuing Certificate Authority Server (see below), it should not be a part of a domain. The CA server has a specific role and cannot be combined with any other role; therefore it needs to be dedicated to this role. However, the hardware requirements for this server are low. It is possible to use a Windows Server 2003 Standard Edition for this purpose, however, Windows Server 2008 R2 or higher is recommended.

Typical Requirements for CA

Storage	50 GB
CPU Cores	1
RAM	1G
Operating System	Windows Server 2008(R2) Standard Edition or Windows Server 2012 Standard Edition ¹
Domain member	No

¹ Or Windows Server 2003 Standard if necessary

Registration Authority (RA)

The Registration Authority is certified by the CA to issue certificates for users for whatever uses the CA permits. The most reliable option is to have the RA as a dedicated server, but this is not required and so the RA can co-exist with other roles on the same server. However, there are number of Microsoft-imposed restrictions on this Windows Server.

Typical Requirements for RA

Storage	50 GB
CPU Cores	2
RAM	4 GB
Operating System	Windows Server 2008(R2) Standard Edition or Windows Server 2012 Standard Edition

For more information on how to set up your PKI for WWPass contact us at sales@wwpass.com