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Chapter 1: Introduction

In This Chapter

4 About ActivClient
5 Getting Started

This guide provides an overview of ActivClient™ features and capabilities:

• ActivClient authentication, digital signature, encryption and associated card and credential management services
• ActivClient components that enable you to use these services
• Operational environment including the supported operating systems and authentication devices

This guide applies to all editions of ActivClient:

• ActivClient 32-bit
• ActivClient 64-bit
• ActivClient CAC 32-bit
• ActivClient CAC 64-bit

The differences related to specific editions are indicated where applicable.

Note: ActivClient CAC is an ActivClient edition configured for the US Department of Defense Common Access Card (CAC) deployment.

About ActivClient

ActivClient is the latest smart card and USB token middleware from ActivIdentity that allows enterprise and government customers to easily use smart cards and USB tokens for a wide variety of desktop, network security and productivity applications.

ActivClient enables the use of PKI certificates and keys, one-time password and static password credentials on a smart card or USB token to secure:

• Desktop applications
• Network logon
• Remote access
• Web logon
• E-mail
• Electronic transactions

This document is for:
• System administrators
• Operators/end users
• People with knowledge of Microsoft® Windows® operating systems as well as some understanding of Public Key Infrastructure
Getting Started

ActivClient 6.2 is available in 2 distributions (CD-ROM):

- ActivClient
- ActivClient CAC

Each distribution contains:

- Welcome page and launch program that starts the appropriate setup file according to the detected platform processor type (32 or 64-bit)
- ActivClient msi files (32- and 64-bit)
  ActivClient CAC is a customized version of ActivClient, with specific configuration for the US Department of Defense Common Access Card deployment.
- ActivIdentity Device Installer 2.2 setup files (32- and 64-bit), providing access to ActivIdentity smart card reader drivers
- Documentation
- Root Certificates folder (ActivClient CAC editions only)
- Microsoft redistributables: Windows Installer 3.1 (provided for convenience)
- Administrative Utilities: unsigned installation files, administrative templates, utilities and samples to customize and manage ActivClient deployments
  This replaces the ActivClient Resource Kit available earlier in a separate distribution.

ActivClient Components

The ActivClient setup consists of several components that you can enable or disable for installation, depending on the scope of your deployment.

The ‘typical’ setup depends on the existing products (and their versions) detected on the machine - the components are enabled or disabled accordingly.

Table 1.1 provides an overview of the components. For complete details, see "Components and Sub-Components" on page 14.
Table 1.1: ActivClient Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Certificate Services</td>
<td>• Provides smart card support for Digital Certificate Services</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td>One-Time Password Services</td>
<td>• Provides support for OTP services</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default except in the CAC editions</td>
</tr>
<tr>
<td>Common Services</td>
<td>This feature provides ActivClient core components required by all ActivClient Services.</td>
</tr>
<tr>
<td>Online Help</td>
<td>• Provides ActivClient online help</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
</tbody>
</table>
Chapter 2: Installation

This chapter explains how to install ActivClient locally.

For information regarding remote installation, refer to ActivClient for Windows Administration Guide.

Prerequisites

Your system must meet the following minimum requirements:

• You have access to ActivClient distribution through either the network or the ActivClient CD-ROM
• You have local administrative rights on your workstation
• Your workstation is configured with a supported operating system:
  – Microsoft Windows 2000 (SP4) - 32-bit
  – Microsoft Windows XP Professional (SP1, SP2 and SP3) - 32-bit
  – Microsoft Windows XP Home Edition (SP2 and SP3) - 32-bit
  – Microsoft Windows Vista (no SP, SP1 and SP2) (all editions) - 32 and 64-bit
  – Windows 7 (all editions) - 32 and 64-bit
  – Microsoft Windows Server 2003 (SP1, R2 and SP2) - 32 and 64-bit
  – Microsoft Windows Server 2008 (no SP, SP2 and R2) (all editions) - 32 and 64-bit

For more information, refer to the ActivClient for Windows Overview.

• If your workstation’s operating system is Windows 2000, Windows XP or Windows Server 2003 (with any service pack), Internet Explorer 5.5 SP2 or later is installed.

Install ActivClient

1. Insert your ActivClient CD-ROM. If the ActivClient Installer page does not appear automatically, run start.exe from the CD-ROM.

2. Click Quick Install from the Welcome Page to start the installation procedure.
   
   - Or -

   Run Setup.exe located in the \Product folder of the CD-ROM.
If required, Windows Installer version 3.1 is installed automatically (from the \Extras\Redistributables folder of the CD-ROM).

The ActivClient installer starts for the relevant platform (32-bit or 64-bit) and the Welcome to the InstallShield Wizard is displayed.

3. Click **Next**.

The **License Agreement** page is displayed.

4. Read the license agreement then do one of the following:
   
   – If you wish to proceed with the execution of the License Agreement, select **I accept the terms in the license agreement**, and click **Next**
   – If you do not wish to proceed with the execution of the License Agreement, select **Cancel** to quit the setup

The **Setup Type** page is displayed.

5. Leave the setup type at the default setting (Typical), and click **Next**.

If you want to customize the feature installation, select **Custom** and go to "Components and Sub-Components" on page 14.

6. Click **Install**.
The **Setup Progress** page is displayed. The progress may take several minutes.

7. Once the setup is completed, the **InstallShield Wizard Completed** page is displayed. Click **Finish**.

8. Select the **Show the readme file** option to automatically view ActivClient Readme file.

**Post-Installation Steps**

- In order to benefit from all ActivClient features immediately, we recommend that you restart your workstation after the installation is complete.
- If you use an ActivIdentity smart card reader or ActivKey™ USB token, the device driver may be already available on your system, or you may need to install it using the ActivIdentity Device Installer. See Appendix A, "ActivIdentity Device Installer," on page 23 for more details.
- In order to use ActivClient 64-bit edition with Firefox™ or Thunderbird™, you need to register ActivClient to these applications. See Appendix B, "Firefox and Thunderbird Support," on page 28.

**Upgrading ActivClient**

ActivClient 6.2 setup allows you to upgrade automatically from the following versions:

- ActivCard™ Gold 2.2 CAC (and any SP)
- ActivCard Gold 2.3.1 (any SP)
- ActivCard Gold for CAC - PKI Only 3.0 (any Feature Pack)
- ActivClient 5.3.1 PKI Only
- ActivClient 5.4 PKI Only
- ActivClient Mini 5.5
- ActivClient PKI 6.0
- ActivClient CAC 6.0
- ActivClient 6.1 (SP1 and SP2) (32-bit and 64-bit editions)
- ActivClient CAC 6.1 (SP1 and SP2) (32-bit and 64-bit editions)

The ActivClient setup automatically detects the previous version and performs the upgrade. You do not need to uninstall the previous version.

**Note**

For all other versions of ActivCard Gold or ActivClient, you need to uninstall them before you install ActivClient 6.2.
Customized Settings

If you had customized the previous ActivClient version (by specifying which components to install, or by modifying configuration options), these customized settings will be preserved after the upgrade.

However, this is not applicable to upgrades from ActivCard Gold.

New Features

The new features of ActivClient 6.2 (that is, those that are not included in version you are upgrading from) are installed according to the typical setup.

For further information concerning the new features, see the ActivClient Readme file in the Documentation folder on the distribution CD-ROM.

Upgrade ActivClient

1. Insert your ActivClient CD-ROM. If the ActivClient Installer page does not appear automatically, run start.exe.

   - Or -

   Run Setup.exe located in the \Product folder of the CD-ROM.

   If required, Windows Installer version 3.1 is installed automatically.

   The ActivClient installer starts for the relevant platform (32-bit or 64-bit) and the Welcome to the InstallShield Wizard is displayed.

2. Click on Quick Install from the Welcome Page to start the installation procedure.

3. Click Next.

   The License Agreement page is displayed.

4. Read the license agreement:

   - If you wish to proceed with the execution of the License Agreement, select I accept the terms in the license agreement and click Next

   - If you do not wish to proceed with the execution of the License Agreement, select Cancel to quit the setup

5. Click Install.

   The Setup Progress page is displayed. The progress may take several minutes.
Once the setup completed, the InstallShield Wizard Completed page is displayed.

6. Click **Finish**.

7. Select the **Show the readme file** option to automatically view the ActivClient Readme file.

ActivClient setup prompts you to start the ActivIdentity Device Installer. For more information, see Appendix A, "ActivIdentity Device Installer," on page 23. It is recommended to upgrade your drivers if you are using an ActivIdentity smart card reader or ActivKey USB token.

8. Click **Yes** to upgrade your drivers or click **No** to complete your installation without upgrading your drivers.

9. When the **Welcome to the InstallShield Wizard** page is displayed, click **Next**.

   The License Agreement page is displayed.

10. Read the license agreement:

    – If you wish to proceed with the execution of the License Agreement, select **I accept the terms in the license agreement**, and click **Next**
    – If you do not wish to proceed with the execution of the License Agreement, select **Cancel** to quit the setup

11. Click **Install**.

    The Custom setup page is displayed.

12. Select the reader driver for the devices you are using and click **Next**.

---

**Important**

Your previously installed drivers may not work after reboot and you may not be able to log on if you:

- Use an ActivIdentity smart card reader or ActivKey USB token
- And -
- Upgrade from an ActivCard Gold or ActivClient version prior to 6.1
- And -
- Choose not to install the driver using the ActivIdentity Device Installer before restarting your workstation
The available features depend on your platform (see Table A-1).

The Setup Progress page is displayed. The progress may take several minutes.

Once the setup has completed, the InstallShield Wizard Completed page is displayed.

13. If you use an ActivIdentity smart card reader or ActivKey product, disconnect and reconnect the smart card reader device from your workstation.

14. Wait for the 'Your new hardware is installed and ready to use' notification message to appear and click Finish.

15. Select the Show the readme file option to automatically view the ActivIdentity Device Installer Readme file.

16. Click Yes when asked to restart your machine.

**ActivDiag Tool**

The ActivDiag Tool diagnoses and reports any software or hardware problems for troubleshooting purposes.
Uninstalling ActivClient

Prerequisites

Before uninstalling ActivClient, it is recommended that you:

- Close Firefox or Thunderbird if one of them is running
- If you are using ActivClient 64-bit edition with Firefox or Thunderbird, unregister the ActivClient module from these applications before uninstalling ActivClient. See Appendix B, "Firefox and Thunderbird Support," on page 28
- Remove all smart cards from smart card readers

Uninstall ActivClient

1. From the Control Panel menu, either:
   - On Vista, click **Uninstall a program** under the Programs section.
   - On non-Vista platforms, double-click **Add/Remove Programs**.

2. Select ActivClient and click **Uninstall** or **Remove**.

3. A confirmation message is displayed.

4. Confirm your choice and click **Yes**.

5. Click **Yes** when asked to restart your machine.
Chapter 3: Customize the Installation

This chapter explains how to customize the ActivClient installation by adding or removing components and sub-components during or after setup.

Components and Sub-Components

When you perform a "typical" setup, ActivClient automatically determines which components to install based on your workstation environment. You can also decide to select which components (and sub-components) to install or not install using a Custom setup. Table 3.1 lists all components and sub-components.

Table 3.1: ActivClient Setup Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Certificate Services</td>
<td>• Provides smart card support for Digital Certificate Services</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td></td>
<td>Includes the following sub-components:</td>
</tr>
<tr>
<td></td>
<td><strong>Microsoft CAPI support</strong></td>
</tr>
<tr>
<td></td>
<td>• Provides smart card support for applications relying on Microsoft CAPI</td>
</tr>
<tr>
<td></td>
<td>(such as Windows PKI Logon, Internet Explorer, EFS or Microsoft Outlook)</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td></td>
<td><strong>Microsoft Outlook usability enhancements</strong></td>
</tr>
<tr>
<td></td>
<td>• Eases the configuration and use of digital certificates in Microsoft</td>
</tr>
<tr>
<td></td>
<td>Outlook</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default if Microsoft Outlook is detected</td>
</tr>
</tbody>
</table>
Table 3.1: ActivClient Setup Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Certificate Services</td>
<td>Firefox and Thunderbird support (32-bit only)</td>
</tr>
<tr>
<td>(continued)</td>
<td>• Provides smart card support for SSL client authentication in Firefox</td>
</tr>
<tr>
<td></td>
<td>• Provides smart card support for e-mail signing and decryption in Thunderbird</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default if either Firefox or Thunderbird are detected</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong></td>
</tr>
<tr>
<td></td>
<td>• During setup, you must close Firefox and Thunderbird</td>
</tr>
<tr>
<td></td>
<td>• Before installing this feature, a user account must have been created in Thunderbird</td>
</tr>
<tr>
<td></td>
<td>• For Firefox and Thunderbird support on a 64-bit operating system, install &quot;PKCS#11 support&quot; and refer to Appendix B, &quot;Firefox and Thunderbird Support,&quot; on page 28</td>
</tr>
<tr>
<td>Entrust® Entelligence™ Desktop Solution support</td>
<td>(32-bit only)</td>
</tr>
<tr>
<td></td>
<td>• Provides PKI services with Entrust Entelligence Desktop Solution</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default if Entrust Entelligence software is detected</td>
</tr>
<tr>
<td></td>
<td>• Is not installed by default in the CAC editions</td>
</tr>
<tr>
<td>PKCS#11 support</td>
<td>• Installs the ActivClient SDK PKCS#11 libraries for compatibility with applications providing smart card support via the PKCS#11 API</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td>One-Time Password Services</td>
<td>• Provides support for OTP services</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default except in the CAC editions</td>
</tr>
<tr>
<td></td>
<td>• Installs OTP support in ActivClient User Console and ActivClient Agent</td>
</tr>
<tr>
<td>Includes the following sub-component:</td>
<td></td>
</tr>
<tr>
<td>Check Point VPN-1 Support</td>
<td>(32-bit only)</td>
</tr>
<tr>
<td></td>
<td>• Provides support for Check Point VPN-1 via the Check Point SAA API</td>
</tr>
<tr>
<td></td>
<td>• Is installed only if Check Point VPN-1 SecuRemote/SecureClient is detected</td>
</tr>
<tr>
<td></td>
<td>• Is not installed by default in the CAC editions</td>
</tr>
</tbody>
</table>
Table 3.1: ActivClient Setup Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Services</strong></td>
<td>This feature provides the ActivClient core components required by all ActivClient services:</td>
</tr>
<tr>
<td><strong>User Console</strong></td>
<td>• Enables end users to manage their smart card and credentials</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td><strong>PIN Initialization Tool</strong></td>
<td>• Enables end users to initialize and reformat their smart card and PIN code</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td><strong>PIN Change Tool</strong></td>
<td>• Enables changing the smart card PIN code</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td><strong>ActivClient Agent</strong></td>
<td>• Displays smart card and smart card reader status in the Windows notification area</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td><strong>Advanced Configuration Manager</strong></td>
<td>• Provides ActivClient configuration options for administrators</td>
</tr>
<tr>
<td></td>
<td>• Is not installed by default (except in the ActivClient CAC editions)</td>
</tr>
<tr>
<td><strong>Troubleshooting and Advanced Diagnostics</strong></td>
<td>• Provides tools to troubleshoot and diagnose ActivClient issues</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
<tr>
<td><strong>Auto-Update Service</strong></td>
<td>• Provides support for ActivClient software automatic updates if configured in your company</td>
</tr>
<tr>
<td></td>
<td>• Is not installed by default</td>
</tr>
<tr>
<td><strong>Card auto-update service with ActivID CMS</strong></td>
<td>• Provides support to automatically update smart cards managed by ActivID Card Management System</td>
</tr>
<tr>
<td></td>
<td>• Is not installed by default</td>
</tr>
<tr>
<td><strong>Online Help</strong></td>
<td>• Provides ActivClient Online help</td>
</tr>
<tr>
<td></td>
<td>• Is installed by default</td>
</tr>
</tbody>
</table>
Customize ActivClient During Installation

1. Follow steps 1 to 4 of the standard installation procedure described in "Install ActivClient" on page 7.

2. When the Setup Type page is displayed, select Custom, and then click Next.

   The Custom Setup page is displayed.

3. Select the program features you want to install from the list using the appropriate option from the right-click menu:

<table>
<thead>
<tr>
<th>To...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install or add a component</td>
<td>Click the icon for the component and then click the appropriate installation option in the displayed list.</td>
</tr>
<tr>
<td>Remove a component</td>
<td>Click the icon for the component and then click X in the displayed list.</td>
</tr>
</tbody>
</table>

   For the complete list of available components and subcomponents, see "Components and Sub-Components" on page 14.

4. Click Next to proceed. The Ready to Install the Program page is displayed.
5. Click **Install**.

6. When the InstallShield Wizard Completed page is displayed, click **Finish**.

7. Select the **Show the readme file** option to automatically view the readme file.

8. To benefit from all ActivClient's features, it is recommended that you reboot your machine after installation is complete.

   In order to use ActivClient 64-bit edition with Firefox or Thunderbird you need to register ActivClient to these applications. See Appendix B, "Firefox and Thunderbird Support," on page 28.

**Customize ActivClient After Installation**

After installing ActivClient, you can modify the ActivClient installation by adding or removing components.

1. From the **Control Panel** menu, either:
   
   - On Vista, click **Programs** and then **Programs and Features**.
   - On non-Vista platforms, double-click **Add/Remove Programs**.

2. Select ActivClient from the program list and click **Change**.
3. In the Program Maintenance window, select **Modify** and click **Next**.

4. Select the program features you want to install from the list using the appropriate option from the right-click menu:

<table>
<thead>
<tr>
<th>To...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install or add a component</td>
<td>Click the <strong>X</strong> icon for the component and then click the appropriate installation option in the displayed list.</td>
</tr>
<tr>
<td>Remove a component</td>
<td>Click the <strong>X</strong> icon for the component and then click <strong>X</strong> in the displayed list.</td>
</tr>
</tbody>
</table>

For the complete list of available components and subcomponents, see "**Components and Sub-Components**" on page 14.

5. Click **Next** to proceed. The Ready to Install the Program page is displayed.

6. Click **Install**.

7. When the InstallShield Wizard Completed page is displayed, click **Finish**.

8. To benefit from all ActivClient's features, it is recommended that you reboot your machine after installation is complete.
In order to use ActivClient 64-bit edition with Firefox or Thunderbird you need to register ActivClient to these applications. See Appendix B, "Firefox and Thunderbird Support," on page 28.
Chapter 4: Deployment

This chapter provides an overview of the ActivClient deployment methods and policy options.

Product Deployment

You can deploy ActivClient by installing the product remotely for a set of users or computers. This dramatically reduces the total cost of ownership of ActivClient because administrators are not required to perform installation in person at every workstation. Users do not require information on how to install the product, thereby eliminating on-site installation support and associated help desk calls.

There are several methods to deploy ActivClient:

• Using the standard local installation (see "Install ActivClient" on page 7)
• Using software push using Active Directory Group Policy Objects
• Using software push using Microsoft System Center Configuration Manager (formerly Systems Management Server - SMS)

The deployment procedures are explained in the ActivClient for Windows Administration Guide.

Policy Deployment

You can deploy the ActivClient policies using the Active Directory Group Policy (GPO) and ActivClient administrative templates (ADM and ADMX) provided on the installation CD-ROM.

You can modify the default values for:

• Card Removal behavior
• PIN Management
• PIN Caching Service
• Certificate Availability
• Outlook Enhancements
• User Console
• ActivClient Agent (System Tray Icon)
• Check Point Secure Authentication Agent API
• Notifications Management
• Logon Window
• Software Auto-Update
• Smart Card Auto-Update
• Smart Card
• Devices
• Terminal Services
• Performance Optimizations
• Advanced Diagnostics
• Logging

The policy definition and deployment procedures are explained in the *ActivClient for Windows Administration Guide*.

Administrative Tools

For further information on the following tools, see the *ActivClient for Windows Administration Guide*:

• Policy definition
• Setup customization
• Setup deployment
• Remote session customization
• Administrative commands
• Upgrading and updating
• Uninstallation
• Troubleshooting tools and strategy

The `\Admin` folder of the ActivClient distribution CD-ROM includes additional tools and information for administrators, such as:

• Active Directory templates: ADM and ADMX format
• Samples for ActivClient software auto-update
• Unsigned setups for ActivClient and ActivIdentity Device Installer.
• ...

For the complete list, see the *ActivClient for Windows Administration Guide*.
Appendix A: ActivIdentity Device Installer

This appendix describes the ActivIdentity Device Installer and explains how to install the device drivers.

About ActivIdentity Device Installer

ActivIdentity Device Installer (AIDI) is a software package that allows installing the drivers for ActivIdentity smart card readers and USB tokens.

Do You Need to Use ActivIdentity Device Installer?

If you use an ActivIdentity smart card reader or ActivKey USB token, you need an ActivIdentity driver for the device. You may find this driver in:

- Windows system files
- Via Windows updates
- ActivIdentity Device Installer available on the ActivClient 6.2 CD-ROM (in the Extras\ActivIdentity Device Installer folder)

If you use a third-party smart card reader, you need to obtain the relevant driver from the vendor (if the driver is not available in Windows or Windows Update).

If you upgrade from a previous version of ActivCard Gold or ActivClient (versions prior to 6.1) that included ActivIdentity device drivers, the ActivIdentity Device Installer is started automatically during the ActivClient installation to enable you to preserve your device driver configuration.

The following table presents the devices for which ActivIdentity currently ships a driver. For each device and operating system, the table indicates if the driver is
available in Windows (Win) or if ActivIdentity provides a driver for it in the ActivIdentity Device Installer (AIDI).

Table A–1: Driver Availability per Operating System

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USB Reader V2</td>
<td>WU</td>
<td>Yes</td>
<td>CCID Yes</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
</tr>
<tr>
<td>USB Reader V3</td>
<td>WU</td>
<td>Yes</td>
<td>CCID Yes</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
</tr>
<tr>
<td>PCMCIA Reader V1</td>
<td>WU</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>PCMCIA Reader V2</td>
<td>WU</td>
<td>Yes</td>
<td>WU Yes</td>
<td>WU Yes</td>
<td>Yes</td>
<td>WU Yes</td>
<td>Yes</td>
<td>WU No</td>
</tr>
<tr>
<td>ActivKey V1 and V2</td>
<td>No</td>
<td>Yes</td>
<td>WU Yes</td>
<td>WU Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>ActivKey SIM and Display</td>
<td>WU Yes</td>
<td>WU Yes</td>
<td>CCID Yes</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
<td>CCID No</td>
</tr>
<tr>
<td>Serial Reader</td>
<td>No Yes No No Yes No No No No No No No No No No No No No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

- CCID: Generic Microsoft CCID driver integrated natively in the OS (Windows Update procedure is not required).
- WU: Windows Update process allows to install or update the drivers.
Install ActivIdentity Device Drivers

Prerequisites

Your system must meet the following minimum requirements:

- You have access to the ActivClient distribution through either the network or the ActivClient CD-ROM
- You have local administrative rights on your workstation
- Your workstation is configured with:
  - Windows 2000 SP4 - 32-bit only
  - Windows XP (SP2 or SP3) - 32-bit only
  - Windows Vista (no SP, SP1 and SP2) - 32-bit and 64-bit
  - Windows 7 - 32-bit and 64-bit
  - Windows Server 2003 SP2 - 32-bit and 64-bit
  - Windows Server 2008 (no SP and SP2) - 32-bit only
- If your workstation's operating system is Windows 2000, Windows XP or Windows Server 2003 (with any service pack), Internet Explorer 5.5 SP2 or later is installed
- Your workstation is configured with Windows Installer 3.0 (or above)
  The setup for Windows Installer 3.1 is available in the ActivClient CD-ROM, in the Extras\Redistributables\Windows Installer folder.

1. On the ActivClient CD-ROM, go to the Extras\ActivIdentity Device Installer folder.
2. Run the ActivIdentity Device Installer .msi file corresponding to your platform.
   The Welcome to the InstallShield Wizard is displayed.
3. Click Next. The License Agreement page is displayed.
4. Read the license agreement.
   - If you wish to proceed with the execution of the License Agreement, select I accept the terms in the license agreement, and click Next.
   - If you do not wish to proceed with the execution of the License Agreement, select Cancel to quit the setup.
5. Click Install. The Custom setup page is displayed.
The available features depend on your platform (see Table A-1). The ActivDiag Tool diagnoses and reports any software or hardware problems for troubleshooting purposes.

6. Select the reader driver for the devices you are using, and click Next.

The Setup Progress page is displayed. The progress may take several minutes.

7. Once the setup has completed, the InstallShield Wizard Completed page is displayed.

If an ActivIdentity smart card reader or ActivKey product is already connected to your workstation, disconnect and reconnect the device from your workstation. In that case, wait for the "Your new hardware is installed and ready to use" notification message to appear and click Finish.

8. Select the Show the readme file option to automatically view the ActivIdentity Device Installer Readme file.

9. Click Yes when asked to restart your machine.
Uninstall ActivIdentity Device Installer

1. From the Control Panel menu, either:
   - On Vista, click Uninstall a program under the Programs section.
   - On non-Vista platforms, double-click Add/Remove Programs.

2. Select ActivIdentity Device Installer and click Uninstall or Remove. A confirmation message is displayed.

3. Confirm your choice and click Yes.

4. Click Yes when asked to restart your machine.
Appendix B: Firefox and Thunderbird Support

In This Appendix

About Firefox and Thunderbird Support

This appendix explains how to install the PKCS#11 library to support Firefox and Thunderbird.

About Firefox and Thunderbird Support

ActivClient supports Firefox and Thunderbird for smart card services via the ActivClient PKCS#11 library.

• ActivClient 32-bit automatically installs the PKCS#11 library into Firefox/Thunderbird (for each user profile) during setup.
• If new profiles are created after ActivClient setup, a manual installation is required.
• ActivClient 64-bit does not install the PKCS#11 library into Firefox/Thunderbird during setup. A manual installation is required.

Install the PKCS#11 Library

Make sure the ActivClient PKCS#11 library has been installed during ActivClient setup.

1. In Firefox or Thunderbird, go to Tools, Options, Advanced and then either the Encryption (Firefox) or Certificates (Thunderbird) tab.
2. Click Security Devices, and, in the Device Manager, click Load.
3. Enter a Module Name and browse to one of the following:
   - If you use ActivClient 32-bit, select the ActivClient PKCS#11 32-bit library: <Program Files>\ActivIdentity\ActivClient\acpkcs201-ns.dll
   - If you use ActivClient 64-bit and Firefox/Thunderbird 32-bit, select the ActivClient PKCS#11 32-bit library: <PROGRAMFILESx86>\ActivIdentity\ActivClient\acpkcs211.dll
   - If you use ActivClient 64-bit and Firefox/Thunderbird 64-bit, select the ActivClient PKCS#11 64-bit library: <Program Files>\ActivIdentity\ActivClient\acpkcs201-ns.dll
4. Click OK.
5. Repeat this operation for all user profiles.
Uninstall the PKCS#11 Library

When you uninstall ActivClient 32-bit, the ActivClient PKCS#11 library is automatically uninstalled from Firefox/Thunderbird.

However, when you uninstall ActivClient 64-bit, you need to manually uninstall the ActivClient PKCS#11 library from Firefox/Thunderbird.

1. In Firefox or Thunderbird, go to Tools, Options, Advanced and then either the Encryption (Firefox) or Certificates (Thunderbird) tab.

2. Click Security Devices, and, in the Device Manager, select ActivClient in the list of security modules and devices.

3. Click Unload.
   If asked, confirm the deletion of the ActivClient module.

4. Click OK.

5. Repeat this operation for all user profiles.
Appendix C: Terms and Acronyms

In This Appendix

30 Terms
31 Acronyms

This appendix lists terms and acronyms used throughout the full set of ActivIdentity ActivClient for Windows technical publications. Not all terms and acronyms appear in all documents.

Terms

Certificate Authority (CA) - The CA issues and manages security credentials and public keys for message encryption in a networked environment. As part of a Public Key Infrastructure (PKI), a CA checks with a registration authority (RA) to verify information provided by the requestor of a digital certificate. If the RA verifies the requestor's information, the CA issues a certificate.

ActivID Card Management System (CMS) - Formally known as ActivCard Identity Management System (AIMS), CMS is a web-based, smart card, credential and application lifecycle management system. CMS augments and works in concert with an enterprise's primary identity management infrastructure components, including popular directory, database, and PKI components.

Cryptographic Service Provider (CSP) - An independent software module that performs cryptography algorithms for authentication, encoding, and encryption.

Federal Information Processing Standard (FIPS 140-2) - FIPS 140-2 is the standard for crypto-module security. FIPS 140-2 level 3 adds additional requirements to FIPS 140-2 level 2. These requirements concern physical security and a trusted path for entering a Cryptographic Service Provider, such as a PIN. FIPS 140-2 level 3 uses local ports and the key pad to enforce such security.

Federal Information Processing Standard 201 (FIPS 201) - FIPS 201 is the standard for Personal Identity Verification (PIV) cards defined for US Government employees and contractors.

My Digital ID Card (MDIDC) - This CMS component allows end users to access the self-service CMS functions, which includes card and credential management.

One-Time Password (OTP) - A one-time password is a password used only once to authenticate to remote applications. One-Time Passwords are only present on smart cards issued with SKI credentials.

Personal Identification Number (PIN) - Is used to authenticate to your smart card in order to perform actions such as Windows PKI logon, remote access and email signature.
Public Key Infrastructure (PKI) - PKI describes the laws, policies, standards, and software that regulate or manipulate certificates and public and private keys.

Registration Authority (RA) - RA is an authority in a network that verifies user requests for a digital certificate and instructs the CA to issue it. An RA is part of a PKI, a networked system that enables companies and users to exchange information safely and securely.

Symmetric Key Infrastructure (SKI) - SKI keys are used to perform strong authentication on remote applications. SKI keys encrypt passwords in:
- Synchronous mode (generates 1 password without any challenge. The server uses the same method to create a password than the smart card)
- Asynchronous: encrypts a challenge

Standalone smart card - Smart card with pre-loaded applets issued by the manufacturer.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>What does it stand for</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>Certificate Authority</td>
</tr>
<tr>
<td>CAC</td>
<td>Common Access Card (for the United States Department of Defense)</td>
</tr>
<tr>
<td>CSP</td>
<td>Cryptographic Service Provider</td>
</tr>
<tr>
<td>FIPS</td>
<td>Federal Information Processing Standard</td>
</tr>
<tr>
<td>GAL</td>
<td>Global Address List</td>
</tr>
<tr>
<td>GP</td>
<td>GlobalPlatform</td>
</tr>
<tr>
<td></td>
<td>Replaces OpenPlatform (OP).</td>
</tr>
</tbody>
</table>
OTP
One-Time Password

PKI
Public Key Infrastructure

PIV
Personal Identity Verification

Smart card issued by the United States government to federal employees and contractors.

RA
Registration Authority

SKI
Symmetric Key Infrastructure
Document Information

ActivIdentity, Inc. welcomes your comments and suggestions.

Your input is an important factor in future revisions of this publication. Please let us know your opinion.

Product: ActivClient for Windows

Document: ActivClient for Windows Installation Guide

Document Reference: AC/WIN/IG/06.2009/v6.2

Please send your feedback via email to: tpd@actividentity.com. If you find errors or have general suggestions for improvement, please indicate the chapter, section and page number. If you would like a reply, please include your name, company, email address, and telephone number.
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