AFS for Windows

Release Notes

Version 3.6

GC09-4559-00

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Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 23.

First Edition (April 2000)

This edition applies to:

IBM AFS for Windows, Version 3.6

and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Introduction

Overview

AFS® is a distributed file system that provides secure, reliable access to information across an enterprise. By seamlessly uniting the directories and files on individual file server machines into one file system accessible from any desktop, AFS presents users with a single filespace independent of machine boundaries.

AFS offers several advantages. It improves the availability of files by employing client-side caching and replication of frequently accessed data across multiple file servers. AFS provides powerful security to protect the information stored in the filespace. In addition, AFS is highly scalable. Virtually unlimited additional server and client machines can be added as needed to an AFS configuration with little impact on existing server and client machines. This enables the file system to grow with the enterprise.

AFS for Windows includes the following products:

- **AFS Server**

  The AFS Server runs AFS server processes on a Windows NT® machine. An AFS Server on a Windows NT machine can be configured as one or more of the following: an AFS File Server, an AFS Database Server, an AFS Backup Server, and an AFS System Control Server. The AFS Server includes the AFS Server Configuration Wizard to facilitate setup.

- **AFS Control Center**

  The AFS Control Center includes two powerful graphical user interface (GUI) tools to assist AFS system administrators in AFS cell administration: the AFS Server Manager, a tool that facilitates the administration of volumes and services on one or more AFS servers (on Windows NT and UNIX systems), and the AFS Account Manager, a tool that enables simple creation and maintenance of AFS user and group accounts.

- **AFS Client**

  The AFS Client provides direct access to the AFS filespace from a PC running Windows NT, enabling users to manage files and directories in AFS.

- **AFS Light**

  AFS Light provides access to the AFS filespace from a PC running Windows 98 or Windows 95 by forwarding AFS requests to another PC on which the AFS Client is installed.

About the Release Notes

This document contains important information about AFS for Windows, version 3.6. This document summarizes the installation prerequisites, product notes, and specific limitations and restrictions of this release.

Note: AFS for Windows users can view the **README.txt** file to check for any additional AFS for Windows information that became available since the writing of this document. The **README.txt** file is installed in the *AFS for Windows Installation***documentation** directory when AFS for Windows is installed.

Audience

This document is written for system administrators responsible for the installation, configuration, and use of the products included in AFS for Windows. This document assumes that readers are familiar with system administration in general and with the use of AFS.

Document Organization

The document has the following organization:

- "Chapter 2. AFS Client Release Notes" on page 3 provides release information for the AFS Client, version 3.6.
- "Chapter 3. AFS Light Release Notes" on page 9 provides release information for AFS Light, version 3.6.
- "Chapter 4. AFS Server Release Notes" on page 13 provides release information for the AFS Server, version 3.6.
- "Chapter 5. AFS Control Center Release Notes" on page 19 provides release information for the AFS Control Center, version 3.6.

Each section describes installation requirements, product notes, and limitations and restrictions for the specified AFS for Windows component. Also, where applicable, descriptions of new features and enhancements that are made available in this release of AFS for Windows are included.

Chapter 2. AFS Client Release Notes

Introduction

This section contains important information about the AFS Client component of AFS for Windows, version 3.6. The AFS Client provides direct access to the AFS filespace from a PC running Windows NT, enabling users to manage files and directories in AFS. The AFS Client includes the AFS Light Gateway, which enables AFS Light users to access the AFS filespace.

AFS Client Installation Requirements

Your system must meet the following hardware, software, and administrative privilege requirements to install the AFS Client.

Hardware

The hardware requirements for installing the AFS Client are:

- A PC using an 80486/66 MHz (or faster) microprocessor or a Pentium-based microprocessor
- At least 16 MB of RAM
- A hard disk with at least 4 MB of available disk space, plus enough additional disk space on the drive where the cache is located to accommodate the desired cache size. (By default, the cache is located on the drive where Windows is installed and the cache size is 20 MB.)

Software

The software requirements for installing the AFS Client are:

- Microsoft Windows NT 4.0 with Service Pack 4 or Service Pack 5

Administrative Privilege Requirement

You must be a member of the local **Administrators** group on your Windows system in order to install, configure, and start the AFS Client.

Product Notes

This section highlights important general information about the AFS Client component of AFS for Windows, version 3.6. It includes descriptions of new features and enhancements made available in this release of the AFS Client.

Additional Configuration Options Available Via the Client Interface

The AFS Client Configuration utility's **Advanced** tab now includes options for configuring logon parameters, diagnostic parameters, and other miscellaneous configuration parameters. From the **Advanced** tab, you can also configure global drive mappings. Many of these configuration options were formerly available to AFS Client users as registry settings.

The **Advanced** tab is accessed from the Windows Control Panel. To display the **Advanced** tab:

1. From the **Start** menu, choose **Settings**, then choose **Control Panel**.
2. Double-click the **AFS Client Configuration** icon to display the AFS Client Configuration utility.
3. Choose the **Advanced** tab.

AFS Client Cache Location Is Now Configurable

The AFS Client Cache is stored in a file named **AFSCache**, rather than in the system paging file. By default, the cache is stored on the drive where Windows is installed. The size of the AFS Client Cache is limited by available free disk space. The cache size must be at least 1 MB. The default cache size is 20480 KB (20MB).

The location of the AFS Client Cache can now be changed. Changing the cache location is useful when there is not sufficient available free disk space on the drive where Windows is installed. To change the cache location, enter a valid, fully qualified filename in the **Cache Path** field on the AFS Client Configuration's **Advanced** tab.

Mapping Global Drives to the AFS Filespace

The AFS Client's graphical user interface can now be used to map global drives to places in the AFS filespace. Global drives are mapped to the AFS filespace when the IBM AFS Client service starts; users are not required to be logged on. To map global drives to AFS:

1. From the **Start** menu, choose **Settings**, then choose **Control Panel**.
2. Double-click the **AFS Client Configuration** icon to display the AFS Client Configuration utility. Select the **Advanced** tab.
3. Click **Add**. The Map Global Drive dialog box appears. In the **Drive Letter** box, choose a network drive or accept the default. In the **AFS Path** box, type a path to the AFS filespace. If desired, enter a short name to be associated with the specified drive letter and AFS path in the **Description** box. Note that a drive letter description can have no more than 12 characters and cannot contain spaces or tabs.

4. Click **OK** to establish the connection. The drive letter and AFS path appear on the Global Drives dialog box. The drive letter now appears in your Windows NT Explorer.

AFS Client Computer Name Must Correspond to the Name Service Host Name

The computer name of an AFS Client machine (as displayed in the **Computer Name** field on the **Identification** tab of the Network dialog box) must correspond to the host name assigned to the computer by the name service (normally the Domain Name Service, or DNS) used to map names to Internet Protocol (IP) addresses. For example, if the machine on which the AFS Client is installed has the computer name **afsclient1** and is in the **yourcompany.com** domain, the corresponding DNS entry for the machine must be **afsclient1.yourcompany.com**.

AFS Command-Line Binaries

The AFS Client includes administration-oriented command suites such as **bos**, **kas**, **vos**, and **pts**. Execute the commands within these suites from the Windows Command Prompt.

The AFS Client Must Be Installed in a Directory Whose Path Contains Only ANSI Characters

The AFS for Windows software must be installed in a directory whose path contains only ANSI characters, for example the default directory **C:\Program Files**.

Disabling All but the Client Component of the AFS for Windows Setup Program

You have the option of altering the AFS for Windows setup program to disable all but the client component. Such a client-only setup program renders users unable to install any components other than the AFS Client. To perform a client-only installation, create the file **setup.co** in the same directory as the other installation files; the setup program then allows only the AFS Client to be installed. Note that the contents of the **setup.co** file are irrelevant. Follow the installation procedure described in *IBM AFS for Windows Quick Beginnings* regardless of the type of installation you are performing.

Temporary Files

The AFS Client for Windows occasionally creates temporary files. To control where such files are created, set your environment variable (TMP or TEMP) to the fully qualified path of the preferred temporary directory. If you do not specify a temporary directory, then any temporary files are created in the current working directory of the process that creates the files.

National Language Support for the AFS Client

AFS provides national language support for the AFS Client graphical user interface (GUI) tools and documentation, including support for bidirectional scripts (Hebrew, Arabic, etc.). The language strings installed are determined by your machine's system default locale, as specified in the Control Panel's Regional Settings Properties dialog box. If no language strings exist for the current locale, then English language strings are installed by default.

Note: The *system default* locale for a machine can be different than the *user* locale (specified by a user) on the machine. However, the language strings installed with AFS for Windows are always determined by the system default locale.

The kpwvalid Password Strength Checker Is Not Used on Windows Systems

When an AFS user password is changed from a Windows system, the **kpwvalid** program is *not* used to check the quality of the new password. (On UNIX systems, if a **kpwvalid** program exists in the same directory as the **kpasswd** program, the **kpwvalid** program checks the quality of every new user password.)

Configurable LAN Adapter Number

The LAN Adapter (LANA) number used by the AFS Client service must match the LANA number setting on your Windows system. By default, the AFS Client service is configured to use LANA number **0** (zero).

You can now use the AFS Client's graphical user interface tools to modify the value of the LANA number used by the AFS Client service. To change the LANA number, enter a new value in the **Lan Adapter Number** field on the AFS Client Configuration's **Advanced** tab. You must restart the AFS Client service after modifying this parameter.

Alternatively, if you do not want to change the default LANA number used by the AFS Client service to match the NetBIOS Configuration of your Windows NT machine, you can instead modify your system's LANA number setting to match the AFS default setting (**0**). Access the **Services** tab on the Control Panel's Network application. Choose **NetBIOS Interface**, and select the **Properties** button. Enter **0** (zero) in the **Lana Number** field. You must restart your machine after making changes to this Windows setting.

WinLogon Graphical Identification and Authentication (GINA) Modules and AFS Authentication

The AFS Client includes the header files and libraries required to build a WinLogon Graphical Identification and Authentication (GINA) module that obtains AFS tokens. These header files and libraries are installed in the **<***AFS for Windows Installation Directory***>\afs\client\program** directory. In addition, a sample program with compiling and linking instructions is provided in **<***AFS for Windows Installation Directory***>\afs\client\program\sample\token.c**.

Cell Database Is Maintained During Upgrade

When the AFS Client software is upgraded, the AFS Client cell database file (**afsdcell.ini**) located in the **Windows** directory is not replaced, in order to preserve local cell configuration information. However, a copy of the cell database as distributed by the vendor is installed in the AFS Client program directory.

Limitations and Restrictions

This section briefly describes the known limitations and restrictions in the AFS Client component of AFS for Windows, version 3.6.

Symbolic Links to AFS Files and Directories

Symbolic links to directories are treated as directories, and symbolic links to files appear as files in Windows NT systems. Neither appear as links.

Currently, you cannot use the Windows interface (the Windows NT Explorer, for example) to delete symbolic links or create symbolic links in the AFS filespace. If you attempt to delete a directory that is a symbolic link using the Windows interface, the directory's contents are deleted. The directory itself is not deleted. If you attempt to delete a file that is a symbolic link using the Windows interface, the link is removed, rather than the target file.

To create and delete symbolic links to AFS files and directories, use the **symlink.exe** program that is provided with AFS for Windows, version 3.6. Execute **symlink** commands from your Windows NT Command Prompt.

AFS Client Can Fail to Load When Network Drives Are in the Application Path

When loading an application (such as the AFS Client), Windows NT searches for the application's dynamic-link libraries (DLLs). One of the places that Windows searches for an application's DLLs is in each directory specified in

the Path environment variable. In the Path environment variable, if a network path is defined before the path that contains a DLL, the application can possible fail to load.

Most services (such as the AFS Client) do not have security access to network drives specified in the Path environment variable. When a network drive is encountered in the path and the application does not have the permission to access the network, Windows fails to distinguish between an Access Denied error caused by a process which cannot access a file and a process which cannot access the network drive that contains the file. Because this distinction cannot be made, the operating system assumes that the file exists but cannot be accessed by the process. This error causes the system to discontinue the search for the DLLs and assume that a DLL cannot be accessed. Since Windows believes that a DLL is inaccessible, it fails to load the application.

In order to avoid this problem, ensure that the directory to an application's DLLs comes before any network drives in the path.

Chapter 3. AFS Light Release Notes

Introduction

This section contains important information about the AFS Light component of AFS for Windows, version 3.6. AFS Light provides access to the AFS filespace from a PC running Windows 95 or Windows 98, enabling users to manage files and directories in AFS. AFS Light accesses the AFS filespace via an AFS Client machine that is configured as an AFS Light Gateway.

AFS Light Installation Requirements

Your system must meet the following hardware, software, and administrative privilege requirements to install AFS Light.

Hardware

The hardware requirements for installing AFS Light are:

- A PC using an 80486/66 MHz (or faster) microprocessor or a Pentium-based microprocessor
- At least 16 MB of RAM
- A hard disk with at least 4 MB of available disk space

Software

The software requirements for installing AFS Light are:

- Microsoft Windows 95 with the Windows Sockets 2 update or Microsoft Windows 98
- AFS Light Gateway

Note: The AFS Light Gateway must be enabled on a Windows NT machine running the AFS Client, version 3.5 or version 3.6. AFS Light accesses AFS through the AFS Light Gateway. See “Accessing AFS via the AFS Light Gateway” on page 10 for more information.

Administrative Privilege Requirement

No administrative privileges are required to install and configure AFS Light.

Product Notes

This section highlights important general information about the AFS Light component of AFS for Windows, version 3.6.

Accessing AFS via the AFS Light Gateway

AFS Light accesses the AFS filespace through an AFS Light Gateway. In order to use AFS Light, you must have at least one machine in the same domain as the AFS Light machine running the AFS Client for Windows, version 3.5 or the AFS Client for Windows, version 3.6.

- **The AFS Light cell database and the AFS Light Gateway cell database must be synchronized**

  In order for an AFS Light user to access a cell, an entry for the cell must exist in both the AFS Light cell database (**afsdcell.ini** file) and the AFS Light Gateway cell database (**afsdcell.ini** file).

- **AFS Light must be able to resolve the AFS Light Gateway's service name**

  AFS Light must be able to resolve the name of the gateway machine in order to communicate with the gateway machine. The name of the gateway machine is the gateway's NetBIOS service name, in the form *mach*–**afs**, where *mach* is the host computer name up to a maximum of 11 characters. Name resolution can be achieved by adding the gateway's NetBIOS service name to the client's LMHOSTS file or to the appropriate DNS or WINS servers. If the AFS Light machine and its AFS Light Gateway machine reside on the same subnet, then name resolution succeeds automatically via a NetBIOS broadcast.

- **The AFS Light Gateway must be able to authenticate an AFS Light user in a Windows context**

  Once configured as an AFS Light Gateway, your AFS Client machine must be able to authenticate AFS Light users in a Windows context. This authentication can be achieved via a *domain* user account or via synchronized *machine* user accounts. A domain user account is a user account in a Windows domain. A machine user account is a user account that is valid only on a particular host machine.

  When the AFS Light Gateway is configured into a Windows domain, an AFS Light user must log onto either a domain user account in the domain to which the gateway belongs or a machine user account with the same username and password as that of a domain user account in the gateway domain.

  If machine user accounts are employed, then these accounts must be synchronized on the AFS Light Gateway and AFS Light machines. A user must log onto an AFS Light machine with the same username and password as that of a machine user account that is defined on the AFS Light Gateway machine.

The use of domain user accounts is recommended to simplify administration.

AFS Light for Windows 95 Requires the Windows Sockets 2 Update

To run AFS Light on a Windows 95 machine, you must install the Windows Sockets 2 update if it is not yet installed. This update is available for download from the Microsoft Web site.

AFS Command-Line Binaries

When installed on a Windows 98 system, AFS Light includes administration-oriented command suites such as **bos**, **kas**, **vos**, and **pts**. Execute the commands within these suites from the Windows Command Prompt. The command suites are *not* available when AFS Light is installed on a Windows 95 system.

AFS Light Must Be Installed in a Directory Whose Path Contains Only ANSI Characters

The AFS for Windows software must be installed in a directory whose path contains only ANSI characters, for example the default directory **C:\Program Files**.

Temporary Files

AFS Light for Windows occasionally creates temporary files. To control where such files are created, set your environment variable (TMP or TEMP) to the fully qualified path of the preferred temporary directory. If you do not specify a temporary directory, then any temporary files are created in the current working directory of the process that creates the files.

National Language Support for AFS Light

AFS provides national language support for the AFS Light graphical user interface (GUI) tools and documentation, including support for bidirectional scripts (Hebrew, Arabic, etc.). The language strings installed are determined by your machine's system default locale, as specified in the Control Panel's Regional Settings Properties dialog box. If no language strings exist for the current locale, then English language strings are installed by default.

Note: The *system default* locale for a machine can be different than the *user* locale (specified by a user) on the machine. However, the language strings installed with AFS for Windows are always determined by the system default locale.

The kpwvalid Password Strength Checker Is Not Used on Windows Systems

When an AFS user password is changed from a Windows system, the **kpwvalid** program is *not* used to check the quality of the new password. (On UNIX systems, if a **kpwvalid** program exists in the same directory as the **kpasswd** program, the **kpwvalid** program checks the quality of every new user password.)

Limitations and Restrictions

This section briefly describes the known limitations and restrictions in the AFS Light component of AFS for Windows, version 3.6.

Encryption Not Supported in Simplified Chinese Version

The Simplified Chinese version of Microsoft Windows 98 does not support encryption, which is needed to transmit AFS passwords from AFS Light to the AFS Light Gateway. In order for AFS Light users to obtain AFS tokens when using the Simplified Chinese version of Microsoft Windows 98, encryption in AFS must be disabled.

To disable encryption in AFS, add the following line to your Windows **Autoexec.bat** file:

```
set AFS_RPC_ENCRYPT=OFF
```

Note that disabling encryption introduces a potential security risk because AFS passwords are transmitted to the AFS Client Gateway in an unencrypted form when tokens are obtained.

Symbolic Links to AFS Files and Directories

Symbolic links to directories are treated as directories, and symbolic links to files appear as files in Windows 98 and Windows 95 systems. Neither appear as symbolic links.

Currently, you cannot use the Windows interface (the Windows Explorer, for example) to delete symbolic links or create symbolic links in the AFS filespace. If you attempt to delete a directory that is a symbolic link using the Windows interface, the directory's contents are deleted. The directory itself is not deleted. If you attempt to delete a file that is a symbolic link using the Windows interface, the link is removed, rather than the target file.

To create and delete symbolic links to AFS files and directories, use the **symlink.exe** program that is provided with AFS for Windows, version 3.6. Execute **symlink** commands from your Windows NT Command Prompt.

Chapter 4. AFS Server Release Notes

Introduction

This section contains important information about the AFS Server component of AFS for Windows, version 3.6. The AFS Server runs AFS server processes on a Windows NT machine. An AFS Server on a Windows NT machine can be configured as one or more of the following: an AFS File Server, an AFS Database Server, an AFS Backup Server, and an AFS System Control Server.

AFS Server Installation Requirements

Your system must meet the following hardware, software, and administrative privilege requirements to install the AFS Server component of AFS for Windows.

Hardware

The hardware requirements for installing the AFS Server are:

- A PC using an 80486/66 MHz (or faster) microprocessor or Pentium-based microprocessor

  Recommended: A PC using a Pentium or higher microprocessor
- At least 16 MB of RAM

  Recommended: 32 MB of RAM or more
- A hard disk with at least 20 MB of available disk space
- At least one NTFS disk volume to hold the AFS file system data. The NTFS volume must not contain any data or files other than that of a Windows NT Recycle Bin to be eligible for configuration as an AFS partition.

Software

The software requirements for installing the AFS Server are:

- Microsoft Windows NT 4.0 with Service Pack 4 or Service Pack 5

Administrative Privilege Requirement

You must be a member of the local **Administrators** group on your Windows system in order to install, configure, and start the AFS Server.

Product Notes

This section highlights important general information about the AFS Server component of AFS for Windows, version 3.6. Included in this section are descriptions of new features and enhancements made available in this release of the AFS Server.

Support for Volumes That Are Greater Than 2 GB

An AFS volume is a collection of related files that are organized into a single, easily managed unit and that can be easily moved between File Server machines to facilitate load balancing across the network. Each AFS volume has a specific quota associated with it. A volume's quota specifies the maximum amount of disk space the information in the volume can occupy. Quota is set on a per volume basis, so it can be increased for volumes that contain more data and decreased for volumes that do not need the additional space. AFS for Windows, version 3.6 now supports volumes with quotas greater than 2 GB.

Encryption Routines Used by the System Control Server Are Included with All Versions of AFS for Windows

Encryption routines used by the Update Service on the System Control Server machine are now being included with *all* versions of AFS for Windows due to the relaxation of United States government export regulations. Previously, government regulations prohibited the export of these encryption routines. Thus, sites that were not running the United States distribution of AFS were not able to use a System Control Server to distribute configuration files, because doing so permitted sensitive system information to be transmitted unencrypted. Now, all sites can use a System Control Server machine to distribute new versions of AFS Server configuration information to all AFS File Server machines.

AFS Server Computer Name Must Correspond to the Name Service Host Name

The computer name of an AFS Server machine (as displayed in the **Computer Name** field on the **Identification** tab of the Network dialog box) must correspond to the host name assigned to the computer by the name service (normally the Domain Name Service, or DNS) used to map names to Internet Protocol (IP) addresses. For example, if the machine on which the AFS Server is installed has the computer name **afsserver1** and is in the **yourcompany.com** domain, the corresponding DNS entry for the machine must be **afsserver1.yourcompany.com**.

Time Clock Synchronization

To support security and database replication protocols, the time clocks on all machines running AFS servers must be synchronized. Time synchronization software can be obtained from numerous sources; for example, Microsoft distributes the **timeserv** time synchronization service with the Windows NT Server Resource Kit.

Securing AFS Server Machines

If the machine on which the AFS Server software is installed is not secure (that is, if nonadministrative personnel are able to log into the machine), then it is strongly recommended that the AFS Server software directories and all AFS partitions on the machine be secured as appropriate for the environment and file system type. However, when securing AFS Server machines, ensure that the Windows NT local **SYSTEM** principal has full access to the AFS software and all AFS partitions; otherwise AFS processes will not be able to run.

Shutting Down AFS File Server Machines

Before shutting down a Windows NT machine that is running as an AFS File Server, always stop the AFS File Server on the machine.

When the AFS File Server is started on a machine, the process creates a salvage file. When the File Server is stopped manually, this salvage file is removed. However, if a Windows NT machine is shut down while the AFS File Server is still running, this salvage file is not removed. When the machine is subsequently restarted, the File Server starts automatically and, upon noticing the presence of the salvage file, executes the Salvager. Because running the Salvager can be very time consuming, it is always preferable to stop the AFS File Server on a machine before shutting the machine down to avoid unnecessarily executing the Salvager process.

Use one of the following procedures to shut down the AFS File Server on a Windows NT machine.

- From the Windows NT Control Panel:
  1. Double-click the **Services** icon. The Services dialog box opens.
  2. In the **Service** list, select the **IBM AFS Server** service.
  3. Choose the **Stop** button. A message box appears, prompting you to confirm that you want to stop the service. Choose the **Yes** button.

     The AFS File Server on the machine is stopped.
- From the Windows NT Command Prompt:
  1. Enter the following command:

     ```
     bos shutdown -server machine_name -wait
     ```

where *machine_name* is the name of the Windows NT machine on which the AFS File Server is running.

2. Press <**Enter**> to execute the command.

Note: In general, machines that are running as AFS File Servers are shut down only to perform preventative maintenance.

Obtaining Crash Dump Files in the Event of Server Problems

It is recommended that you configure all AFS Server machines to create a crash dump file in the event of a server failure. This information is important for technical support personnel to use in order to diagnose a server problem. Consult your Microsoft Windows NT documentation for information on how to configure the Dr. Watson utility to generate a binary crash dump file automatically when an application error occurs.

The AFS Server Must Be Installed in a Directory Whose Path Contains Only ANSI Characters

The AFS for Windows software can only be installed in a directory whose path contains only ANSI characters, for example the default directory **C:\Program Files**.

Temporary Files

The AFS Server for Windows occasionally creates temporary files. To control where such files are created, set your environment variable (TMP or TEMP) to the fully qualified path of the preferred temporary directory. If you do not specify a temporary directory, then any temporary files are created in the current working directory of the process that creates the files.

National Language Support for the AFS Server

AFS provides national language support for the AFS Server graphical user interface (GUI) tools and documentation, including support for bidirectional scripts (Hebrew, Arabic, etc.). The language strings installed are determined by your machine's system default locale, as specified in the Control Panel's Regional Settings Properties dialog box. If no language strings exist for the current locale, then English language strings are installed by default.

Note: The *system default* locale for a machine can be different than the *user* locale (specified by a user) on the machine. However, the language strings installed with AFS for Windows are always determined by the system default locale.

The kpwvalid Password Strength Checker Is Not Used on Windows Systems

When an AFS user password is changed from a Windows system, the **kpwvalid** program is *not* used to check the quality of the new password. (On UNIX systems, if a **kpwvalid** program exists in the same directory as the **kpasswd** program, the **kpwvalid** program checks the quality of every new user password.)

Configuring a Server into a Cell with pre-3.5 Database Servers Requires the Principal Password

If you configure the AFS Server for Windows, version 3.6, into an AFS cell in which the Database Servers are running a version of AFS older than version 3.5, during the configuration process a dialog box prompts you to provide the AFS principal password.

Note: If for some reason the AFS principal password is unknown, you can instead enter the 24–character string of octal digits representing the AFS principal's key. To obtain the octal key, issue either the **kas examine** command or **boslistkeys** command on an AFS Database Server machine. Note, the server must be running in **noauth** mode in order to display the AFS principal's octal key.

Limitations and Restrictions

This section briefly describes the known limitations and restrictions in the AFS Server component of AFS for Windows, version 3.6.

AFS bosserver Process Does Not Execute the Notifier Program When a Process Terminates

The AFS **bosserver** process does not currently execute the registered notifier command (if one is specified) when a process under its control terminates.

Chapter 5. AFS Control Center Release Notes

Introduction

This section contains important information about the AFS Control Center component of AFS for Windows, version 3.6. The AFS Control Center provides two powerful graphical user interface (GUI) tools to assist AFS system administrators in AFS cell administration: the AFS Server Manager and the AFS Account Manager.

AFS Control Center Installation Requirements

Your system must meet the following hardware, software, and administrative privilege requirements to install the AFS Control Center component of AFS for Windows.

Hardware

The hardware requirements for installing the AFS Control Center are:

- A PC using an 80486/66 MHz (or faster) microprocessor or Pentium-based microprocessor
- At least 16 MB of RAM
- A hard disk with at least 4 MB of available disk space

Software

The software requirements for installing the AFS Control Center are:

- Microsoft Windows NT 4.0 with Service Pack 4 or Service Pack 5

Administrative Privilege Requirement

You must be a member of the local **Administrators** group on your Windows system in order to install the AFS Control Center.

Product Notes

This section highlights important general information about the AFS Control Center component of AFS for Windows, version 3.6.

The AFS Control Center Must Be Installed in a Directory Whose Path Contains Only ANSI Characters

The AFS for Windows software can only be installed in a directory whose path contains only ANSI characters, for example the default directory **C:\Program Files**.

Temporary Files

The AFS Control Center for Windows occasionally creates temporary files. To control where such files are created, set your environment variable (TMP or TEMP) to the fully qualified path of the preferred temporary directory. If you do not specify a temporary directory, then any temporary files are created in the current working directory of the process that creates the files.

National Language Support for the AFS Control Center

AFS provides national language support for the AFS Control Center graphical user interface (GUI) tools and documentation, including support for bidirectional scripts (Hebrew, Arabic, etc.). The language strings installed are determined by your machine's system default locale, as specified in the Control Panel's Regional Settings Properties dialog box.

Note: The *system default* locale for a machine can be different than the *user* locale (specified by a user) on the machine. However, the language strings installed with AFS for Windows are always determined by the system default locale.

If no language strings exist for the current locale, then English language strings are installed by default.

The kpwvalid Password Strength Checker Is Not Used on Windows Systems

When an AFS user password is changed from a Windows system, the **kpwvalid** program is *not* used to check the quality of the new password. (On UNIX systems, if a **kpwvalid** program exists in the same directory as the **kpasswd** program, the **kpwvalid** program checks the quality of every new user password.)

Tokens Obtained for Control Center Applications Expire after 25 Hours

In order to use either the AFS Server Manager or the AFS Account Manager, users must obtain AFS tokens. The lifetime of tokens obtained in either application is always 25 hours and 25 minutes, regardless of the Maximum Ticket Lifetime designated for the user.

Server Manager Displays All Server Entries Referenced in the Volume Location Database (VLDB)

The AFS Server Manager displays a server icon for every server entry in the Volume Location Database (VLDB). If an AFS server has been decommissioned, but its VLDB entry has not been removed, then the Server Manager continues to display an icon for the server.

To remove an obsolete AFS File Server entry from the VLDB on a Database Server running AFS version 3.5 or later, issue the following command:

vos changeaddr <*ip_address*> **-remove**

where *ip_address* is the Internet Protocol (IP) address of the server machine that has been decommissioned.

On AFS Database Servers running a version of AFS older than version 3.5, there is currently no command for removal of obsolete server entries in the VLDB. However, to prevent the AFS Server Manager from displaying decommissioned servers, you can modify the Windows NT Registry so that the AFS Server Manager disregards all machines with IP addresses of a specified pattern.

To prevent the AFS Server Manager from displaying server machines with IP addresses of a specified pattern, use the following steps to modify the Windows NT Registry:

1. From the Start menu, choose **Run**. In the Open box, type `regedit`, and then choose **OK**. The Windows NT Registry Editor opens.
2. Right-click the **\\HKEY_LOCAL_MACHINE\Software\TransarcCorporation\AFS Control Center** key. From the context menu that opens, choose **New**, and then choose **DWORD Value**. A New Value entry is added to the key.
3. Specify the name of the new value entry by typing `IgnoreBadAddrs` as the new value.
4. Double-click the new **IgnoreBadAddrs** entry. The Edit DWORD Value dialog box opens.
5. In the **Value data** box, specify in hexadecimal notation the IP address or range of IP addresses to ignore. For example, to instruct the AFS Server Manager to disregard any machines listed in the VLDB with IP addresses match the pattern **10.0.0.***, enter **`0A0000FF`** in the **Value data** box. (The hexadecimal value **FF** represents a wildcard.)
6. Choose **OK** to close the Edit DWORD value box and save the new registry entry.
7. Close the Registry Editor.

Note: To take advantage of this feature, it is advisable to change the IP addresses of any decommissioned servers in the VLDB to easily recognizable unused IP addresses in a specific range, for example **10.0.0.1**, **10.0.0.2**, **10.0.0.3** etc. Then add the **IgnoreBadAddrs** registry entry as described in the previous steps to instruct the AFS Server Manager to ignore all IP addresses within the specified range.

Limitations and Restrictions

There are currently no known limitations and restrictions for the AFS Control Center component of AFS for Windows, version 3.6.

Notices

First Edition (April 2000)

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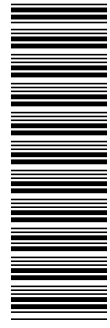

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