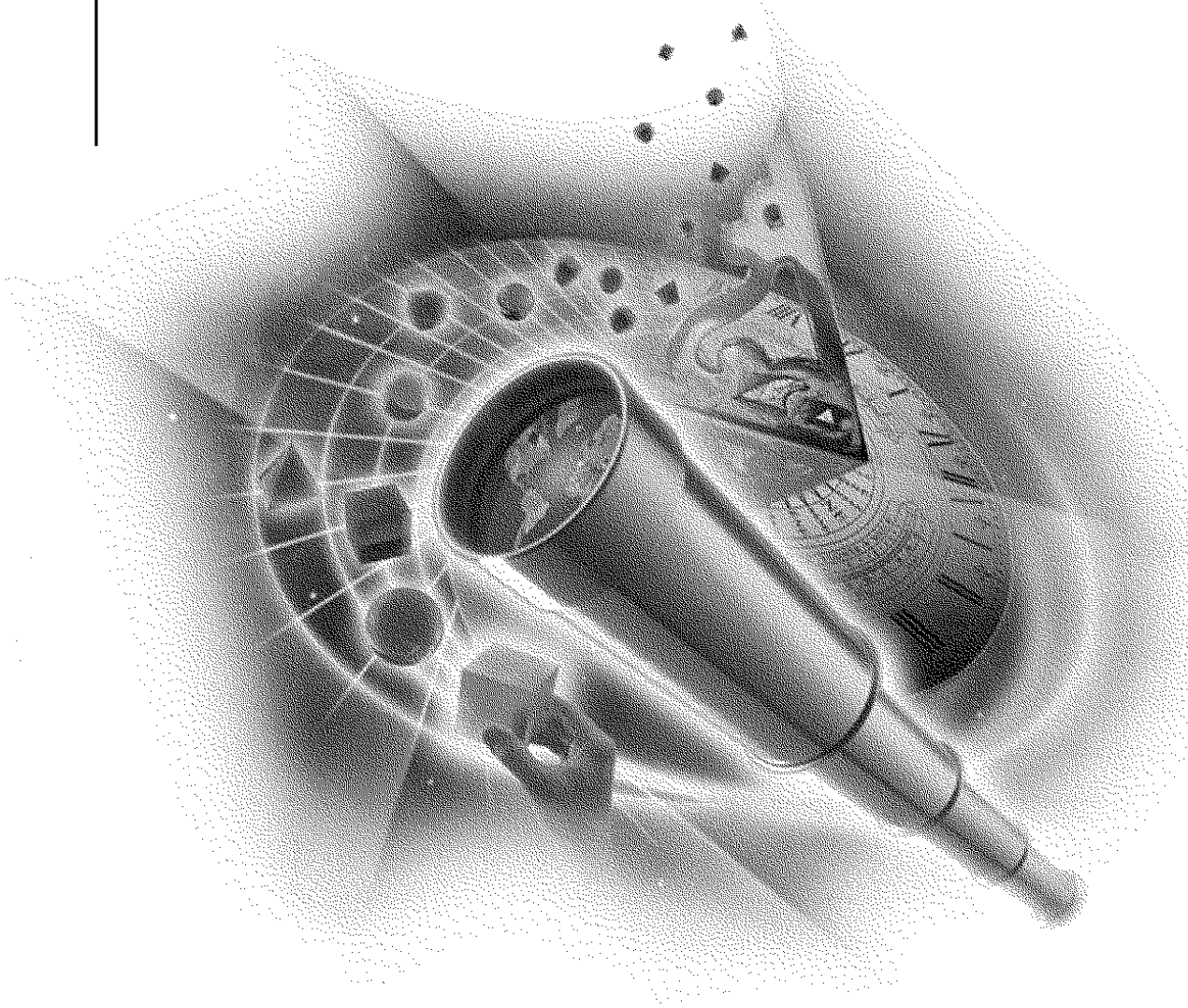


VERSION 2.0

Synchronicity  
Password Utilities  
Guide



**Synchronicity**<sup>™</sup>  
NETWORK DIRECTORY INTEGRATION SOFTWARE

**Novell**<sup>®</sup>

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**Novell, Inc.  
122 East 1700 South  
Provo, UT 84606  
U.S.A.  
800-858-4000**

**Synchronicity Password Utilities Guide  
March 1999  
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# Overview

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- “Product Overview” on page v
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- “Additional Documentation Resources” on page vii

## Product Overview

Synchronicity™ is a solution that automatically synchronizes account and password information for multi-vendor networks. This document provides the necessary information to properly manage the password synchronization functionality in the Synchronicity products.

## Product Components

Synchronicity Password Utilities may use the following components:

<b>Component</b>	<b>Description</b>
Global Event Serves Broker (NVGES.NLM)	A NetWare Loadable Module™ (NLM™) for NetWare 4.1 and later, which provides event notification as changes are made to NDS.
Global Event Services API Library (NVGESAPI.NLM)	A NetWare Loadable Module (NLM) for NetWare 4.1 and later that allows other NLM files, such the NVSYNNW3.NLM, access to Global Event Services functionality.

Component	Description
Synchronization agent	<p>A Windows NT application that receives NDS change notifications from the Global Event Services Broker NLM and synchronizes those changes with the NT Server account database. The synchronization application requires Windows NT version 3.51 or later. Both NT Server and NT Workstation are supported.</p> <p>Synchronicity for NetWare 3 uses NetWare 4 (NVSYNW3.NLM), a NetWare Loadable Module (NLM) for NetWare 4.1 and later that synchronizes NDS changes reported by Global Event Services with one or more NetWare 3 servers.</p>
NetWare Administrator snapin modules for Windows 95/98 and Windows NT	<p>These NetWare Administrator snapin modules provide capabilities for managing NetWare 3 accounts from NDS. In addition, these snapins also support management of the Global Event Services NLM. NetWare Administrator for Windows 95<sup>TM</sup>/98 and Windows NT<sup>®</sup> are supported.</p>
Synchronicity Password Utilities for Windows 95/98 and Windows NT	<p>These program files can be used by users and network administrators to easily change network passwords in a manner which supports synchronization with all products linked with Synchronicity products.</p>

# Additional Documentation Resources

For additional information, see the following resources:

---

To learn more about	See
The installation process that is common to all Synchronicity products	<i>Synchronicity Overview and Installation Guide</i> . This document can be found in electronic form on the CD-ROM or on the NetVision web site, <a href="http://www.netvision.com">http://www.netvision.com</a> .
The procedures to get started installing the Synchronicity products right away	<i>Quick Starts</i> . This document can be found in electronic form on the product CD-ROM or on the NetVision web site, <a href="http://www.netvision.com">http://www.netvision.com</a> .
Details about using Synchronicity	Online help. Online help for the Synchronicity product is available within the utility. Click Help within any dialog for context-sensitive help.
The configuration and operation of the Global Event Services Broker NLM	<i>Global Event Services Administrator Guide</i> . This document can be found in electronic form on the product CD-ROM or on the NetVision web site, <a href="http://www.netvision.com">http://www.netvision.com</a> .
Vital program information such as changes to the program, files, or documentation	Readme files.

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# 1 **Getting Started**

This chapter contains information about the following:

- “Installing the Synchronicity Password Utilities” on page 1
  - “Synchronicity Administrator Password Utility” on page 3
  - “Synchronicity Windows 95/98 Password Provider” on page 3
  - “Synchronicity User Password Utilities” on page 4
  - “Help Files” on page 4
  - “Notes User ID Transfer Utility and Single Sign-On” on page 4

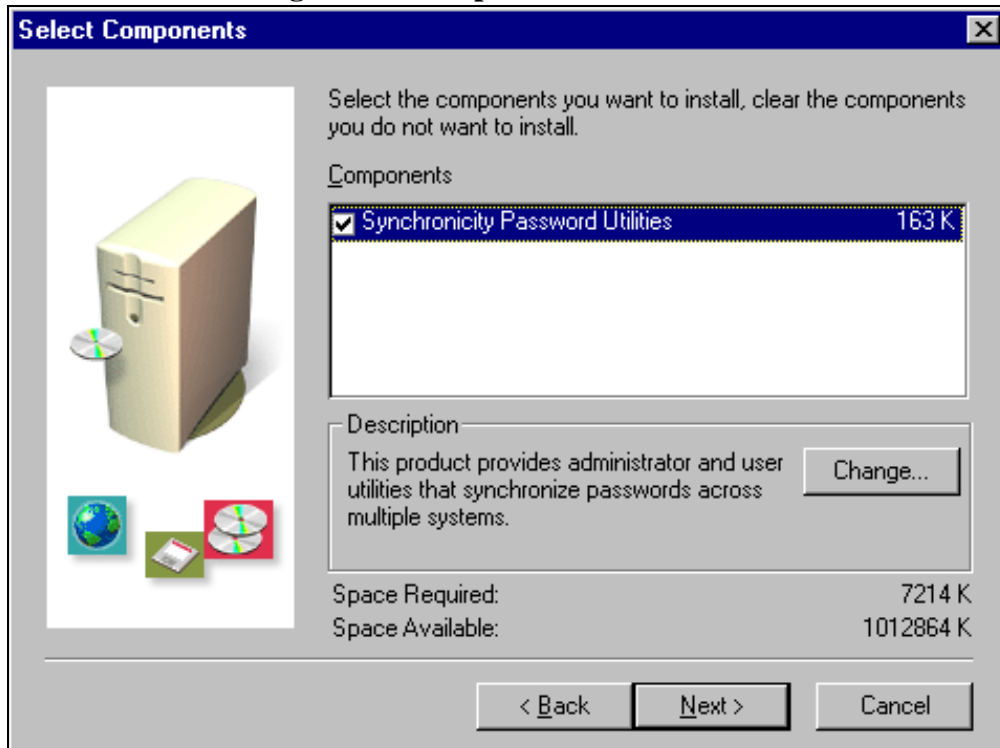
## Installing the Synchronicity Password Utilities

The Synchronicity Password Utilities can be installed either by running the Synchronicity™ installation program or by copying the required files and configuring the utilities manually.

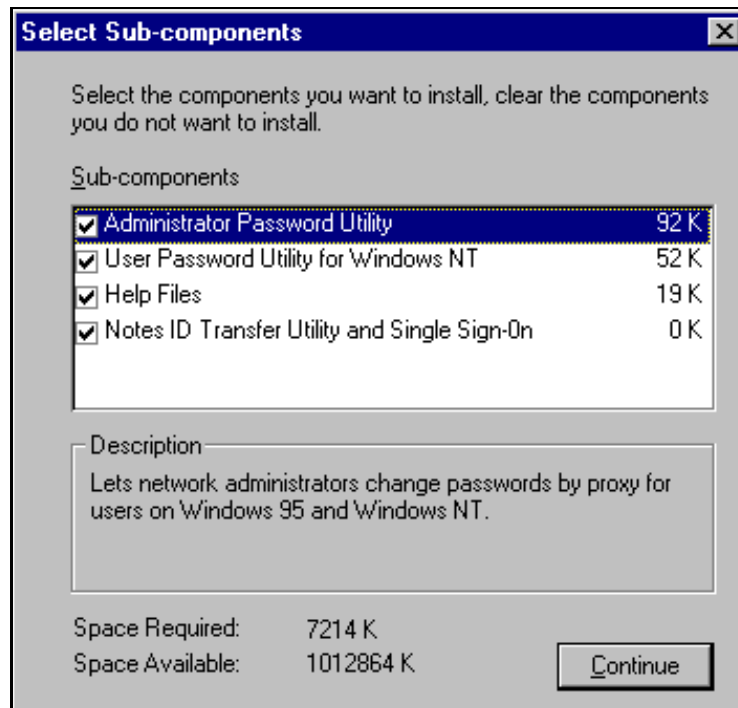
For additional system requirement information, refer to *Synchronicity Quick Starts*.

The Synchronicity installation program lets you install the Synchronicity Password Utilities alone (see ) or with All Products. Select the Change button to specify the Synchronicity Password Utility components to install (see Figure 1-1).

## Selecting Install Components



**Figure 1-1**  
**Selecting Password Items**



## **Synchronicity Administrator Password Utility**

The Synchronicity Administrator Password Utility file NVAPWD.EXE can be copied to any network or local directory.

This utility requires a Novell® Client™ for Windows 95/98 with NDS™ support. The files located in the \FILES\SYSTEM.WIN directory may also be required for some workstations, but make sure that you do not overwrite any newer versions of these files.

## **Synchronicity Windows 95/98 Password Provider**

The Synchronicity Windows 95/98 Password Provider files NVPP95.DLL, NVPWDAPI.DLL and NVPWDMS.DLL should be copied to the Windows SYSTEM directory. For example, C:\WINDOWS\SYSTEM.

The necessary registry entries as contained in the file NVPP95.REG should be registered either by 1) running REGEDIT.EXE, clicking Registry > Import Registry File, then specifying the location of the file NVPP95.REG, or 2) typing "REGEDIT NVPP95.REG" at the command line.

When using the Microsoft Client for NetWare Networks with the Client Service for NDS, the Microsoft system files relating to DCOM and ADSI must be installed.

The files located in the \FILES\SYSTEM.WIN directory may also be required for some workstations, but make sure that you do not overwrite any newer versions of these files.

## Synchronicity User Password Utilities

The Synchronicity User Password Utilities files—NVUPWD95.EXE for Windows 95/98 and NVUPWDNT.EXE for Windows NT—can be copied to any network or local directory.

This utility requires a Novell Client for Windows 95/98 with NDS support. The files located in the \FILES\SYSTEM.WIN directory may also be required for some workstations, but make sure that you do not overwrite any newer versions of these files.

## Help Files

The Synchronicity Password Utilities help file NVPWDHLP.HLP can be copied to the same directory where any of the Synchronicity Password Utilities are copied.

## Notes User ID Transfer Utility and Single Sign-On

While you can manually copy the files as will be explained, using the Synchronicity installation program is recommended.

The Notes User ID Transfer Utility files SYLNIDS.EXE and SYLNIDS.DLL should be copied to the \NOTES directory. The help files SYLNIDS.HLP and SYLNIDS.CNT can be copied to the \NOTES\NDS\ENGLISH directory.

Before running the Notes ID Transfer Utility, add your local User ID file to the Lotus Notes Links setting for your NDS user account. (For information on adding ID files in NDS user objects, refer to *Synchronicity for Notes Administrator Guide* or search *Synchronicity for Notes Help*.)

Single Sign-On should only be enabled on machines running the Lotus Notes® Client but that are not running the Synchronicity for Notes Service Agent.

Single Sign-On can be enabled by adding the following entries to the NOTES.INI file:

MatchName=1

EXTMGR\_ADDINS=SyLNPwd.dll



## 2 ***Synchronicity Password Utilities***

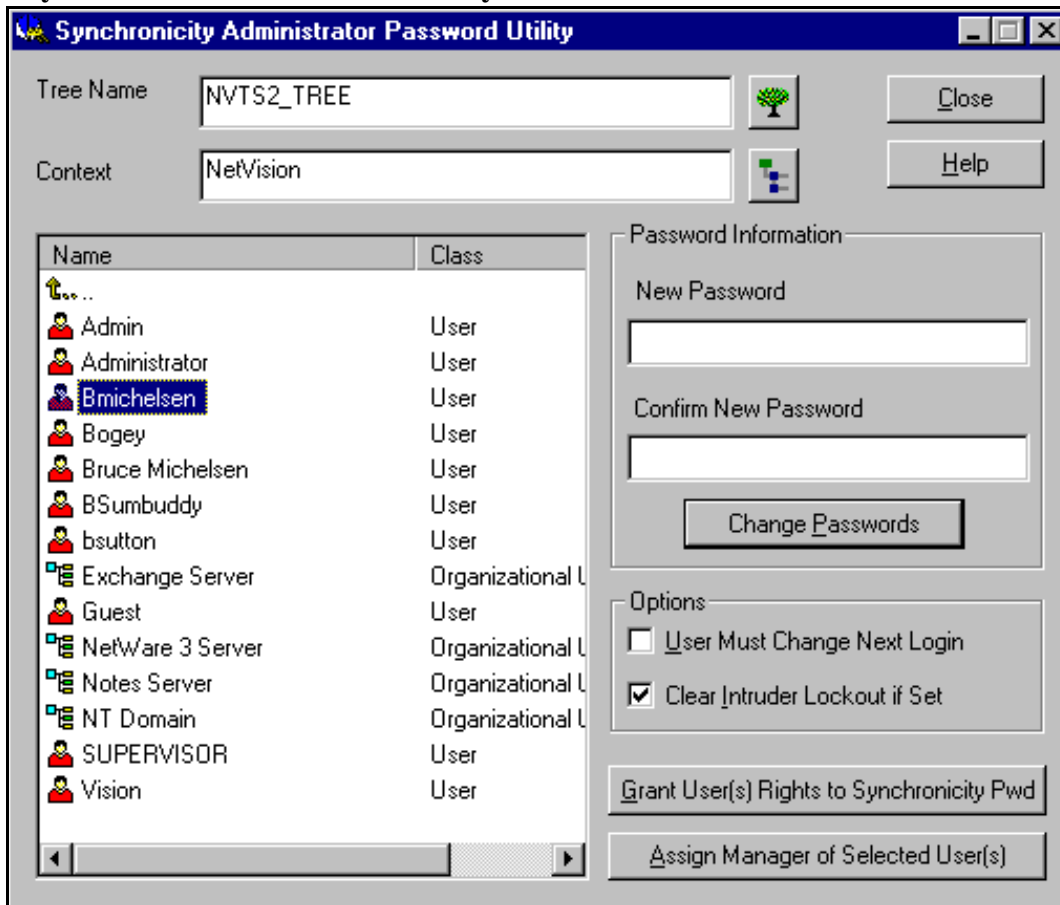
This chapter contains information about the following:

- “Administrator Password Utility” on page 8
- “Windows 95/98 Password Provider” on page 10
  - “Components” on page 10
  - “Dependencies” on page 10
  - “Limitations” on page 11
  - “Configuration” on page 12
  - “Changing All Passwords” on page 13
  - “Changing Only the Synchronicity Password” on page 14
  - “Changing the NetWare 4 Password Due to Password Expiration” on page 15
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# Administrator Password Utility

The Synchronicity™ Administrator Password utility is designed to allow network administrators and help desk personnel to easily change the passwords for the selected NDS™ user accounts in a manner that supports password synchronization using the various Synchronicity products. Figure 2-1 contains the main window of the Administrator Password utility. The main fields contained in the window are described below.

Figure 2-1  
Synchronicity Administrator Password Utility



## Change Password

Clicking this button will cause the NDS and Synchronicity passwords for the selected user accounts to be changed to the value specified in the New Password and Confirm New Password fields.



## User Must Change Next Login

This field indicates whether or not the users will be forced to change their password the next time they log in. This field is ignored if the “Password Change by Proxy” feature is being used.

If the Synchronicity Password Monitor for NT is running in the domain, users are not forced to change their password because the expiration is overwritten with the default interval set in NetWare Administrator > Password Restrictions.

## Clear Intruder Lockout if Set

This field controls whether the intruder lockout flag will be cleared, if necessary. This field is ignored if the “Password Change by Proxy” feature is being used, with the intruder lockout always being cleared by the Password Change by Proxy process.

## Grant User(s) Rights to Synchronicity Pwd

Clicking this button will cause the granting of rights to the selected NDS users so that users can change their own Synchronicity password. The various Synchronicity products will normally perform this granting of rights automatically, whenever an NDS user is assigned a Synchronicity link to an account on another platform.

## Assign Manager of Selected User(s)

Clicking this button will cause that a specified user or group be granted rights to modify the Synchronicity password of all of the selected NDS user accounts.

# Windows 95/98 Password Provider

The Synchronicity Password Provider for Windows® 95/98 is a Windows 95™/98 DLL that integrates with the Password control panel. It is a password provider and integrates with the Windows 95/98 password support mechanism. Changes to the Windows password will allow the change of the NDS password and allow it to be synchronized by the installed Synchronicity products.

Even in the case of an NDS password expiring, the Novell® Client™ will prompt for the new password and the Synchronicity Password Provider for Windows 95/98 will allow the automatic synchronization of this password. Users will not have to change the process to which they are already accustomed. No separate utility or process is required.

## Components

The following files are required and are copied by the Synchronicity install.

Filename	Location	Description
NVPP95.DLL	Windows SYSTEM directory	Windows 95/98 Password Provider.
NVPWDAPI.DLL	Windows SYSTEM directory	Synchronicity password support module for Novell NDS clients.
NVPWDMS.DLL	Windows SYSTEM directory	Synchronicity password support module for Microsoft NDS clients.

## Dependencies

The following are requirements for the Synchronicity Password Provider for Windows 95/98:

- Windows 95/98 workstation
- Novell Client for Windows 95/98 or Microsoft Client for NetWare Networks with Service for NDS installed. When using the Microsoft Client for NetWare Networks with the Service for NDS, the Microsoft system files relating to DCOM and ADSI must be installed.

- One or more of the following products
  - Synchronicity for NT
  - Synchronicity for Exchange
  - Synchronicity for Notes
  - Synchronicity for NetWare 3

The Synchronicity password must be synchronized with the Windows 95/98 password and can be set with the Passwords control panel applet. This is enabled by default by the installation program.

If the Synchronicity password is to be synchronized with NDS passwords through the Password Has Expired process of the Novell Client for Windows 95/98, then the Synchronicity Password Provider and the Novell Netware password provider must both be enabled in the Passwords control panel applet.

## Limitations

When connecting to multiple NDS trees, the Synchronicity Password Provider will only change the Synchronicity password for the NDS trees to which authentication has already been performed. If only one NDS tree is in use or if the primary tree authentication is the one which is running Synchronicity then this limitation does not apply.

Following is an example of this limitation. User Bob authenticates to two separate trees which are both running Synchronicity. The first tree is Bob's corporate network connection and his second is the result of a permanent drive mapping to a local server in a separate tree. If Bob's primary password on his NDS tree has expired and requires changing, then Bob is allowed to change it. The Synchronicity Password Provider will immediately display a list of all NDS connections to include the Synchronicity synchronization. Unfortunately, the workstation has not authenticated to Bob's second tree because the permanent drive mapping has not yet been processed by Windows 95/98. Therefore, only the primary NDS tree will have a synchronized password with Windows 95/98, NDS and Synchronicity.

When using the Microsoft NDS client, only one NDS tree is supported. When using the Microsoft Client for NetWare Networks with the Service for NDS, the Microsoft system files relating to DCOM and ADSI must be installed.

## Configuration

The configuration of the Synchronicity Password Provider is accessible through the Windows 95/98 Control Panel Passwords applet. See Figure 2-2.

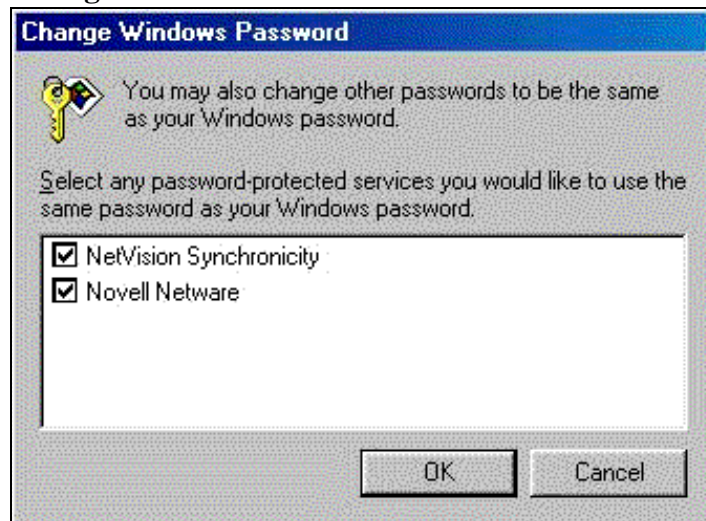
Figure 2-2

### Password Control Panel Dialog



To synchronize Synchronicity passwords with the Windows 95/98 password click the Change Windows Password button. This will display the Change Windows Password window. See Figure 2-3.

**Figure 2-3**  
**Selecting Passwords to Change**



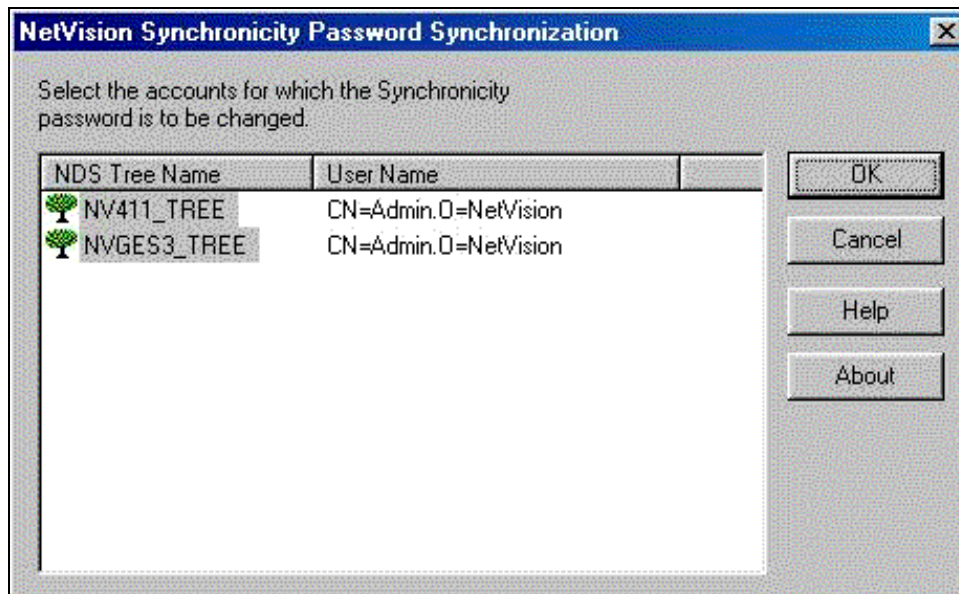
The Synchronicity item must be checked for Synchronicity to synchronize the Windows 95/98 password with the installed Synchronicity products.

To synchronize the NetWare 4 (NDS) password with Synchronicity, both NetVision Synchronicity and Novell Netware must be checked.

## **Changing All Passwords**

To change all the passwords, click the Change Windows Password button from the Passwords applet. Check all the items and click OK. See Figure 2-2. Enter the passwords when prompted. When the Synchronicity Password Synchronization window is displayed, there will be a list of NDS trees indicating current NDS connections. Select the trees for which you would like the passwords to synchronize for Synchronicity. See Figure 2-4.

**Figure 2-4**  
**Selecting NDS Accounts**



## Changing Only the Synchronicity Password

To change only the Synchronicity password, click Change Other Passwords from the Passwords applet. See Figure 2-2. This will display the Select Password window. See Figure 2-5. Select the NetVision Synchronicity item, then click Change.

**Figure 2-5**  
**Selecting Password to Change**



## Changing the NetWare 4 Password Due to Password Expiration

When the NetWare NDS password has expired and the user is prompted to change it during login, the Synchronicity Password Provider will display a window. See Figure 2-4. Select the trees to change the Synchronicity password and the password will synchronize to the other platforms running Synchronicity.

### Registry Entries

A single new registry key is added. It is

**HKEY\_LOCAL\_MACHINE\System\CurrentControlSet  
\control\PwdProvider\NVPP95**

Following are the string names, their initial values and description.

String Name	Value	Description
ChangePassword	PPChangePassword	Name of function to change Synchronicity password
Description	Synchronicity	Text description of Synchronicity Password Provider
GetPasswordStatus	PPGetPasswordStatus	Name of function to report status of Synchronicity Password Provider
ProviderPath	NVPP95.DLL	Name and path of DLL. If no path is given then standard Windows defaults will be searched. The default installation directory is the %WINDOWS%\SYSTEM directory.
LogFileName	C:\NVPP95.LOG	Name and path of the log file to be used to report any problems encountered while trying to load or use the password provider.

Following are the numeric names, their initial values and a description:

<b>String Name</b>	<b>Value</b>	<b>Description</b>
LogFileLevel	2	Indicates the type of information that will be written to the report log file. 1 = errors only; 2 = errors and warnings; 3 = errors, warnings and informational messages; 4 = all but diagnostic messages; 5 = all including diagnostic messages.

Following are the binary names, their initial values and a description:

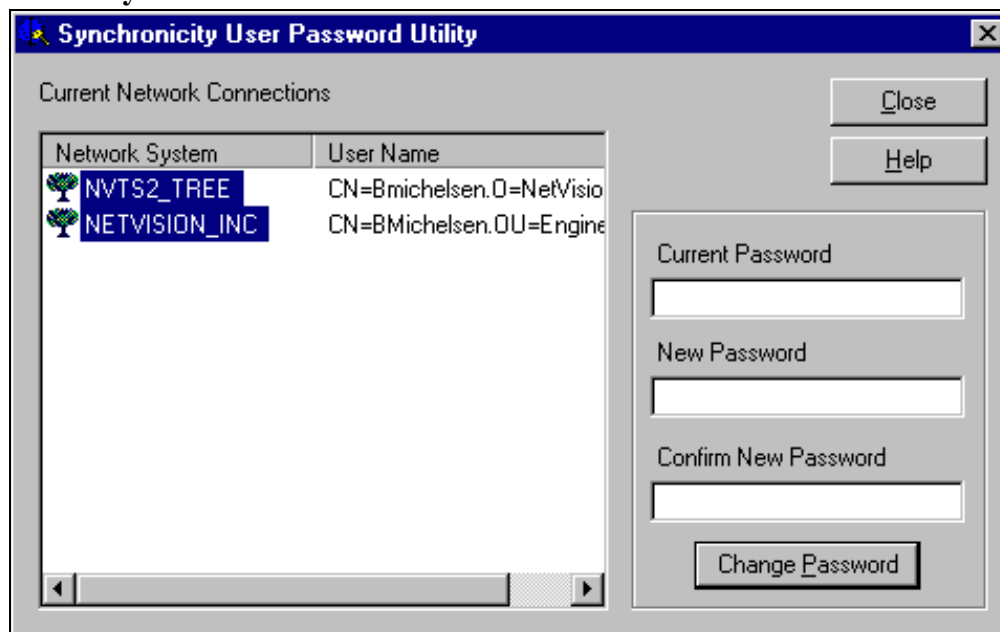
<b>String Name</b>	<b>Value</b>	<b>Description</b>
UseMasterKey	01 00 00 00	Indicates whether a password provider is to be synchronized with the Windows password. The value "01 00 00 00" indicates the password is to be synchronized with the Windows password and therefore the Synchronicity Password Provider will be enabled by default. The value "00 00 00 00" indicates the password provider is not to be synchronized with the Windows password.



## Windows 95/98 User Password Utility

The Synchronicity User Password utility for Windows 95/98 should only be used in cases where the Synchronicity Password Provider for Windows 95/98 cannot be used for any reason. When the Change Password button is clicked, the NDS and Synchronicity passwords will be changed for the selected NDS trees. Since the Synchronicity password was changed, any accounts linked to the selected NDS accounts by any of the Synchronicity products will also have their passwords changed.

Figure 2-6  
User Password Utility for Windows 95/98

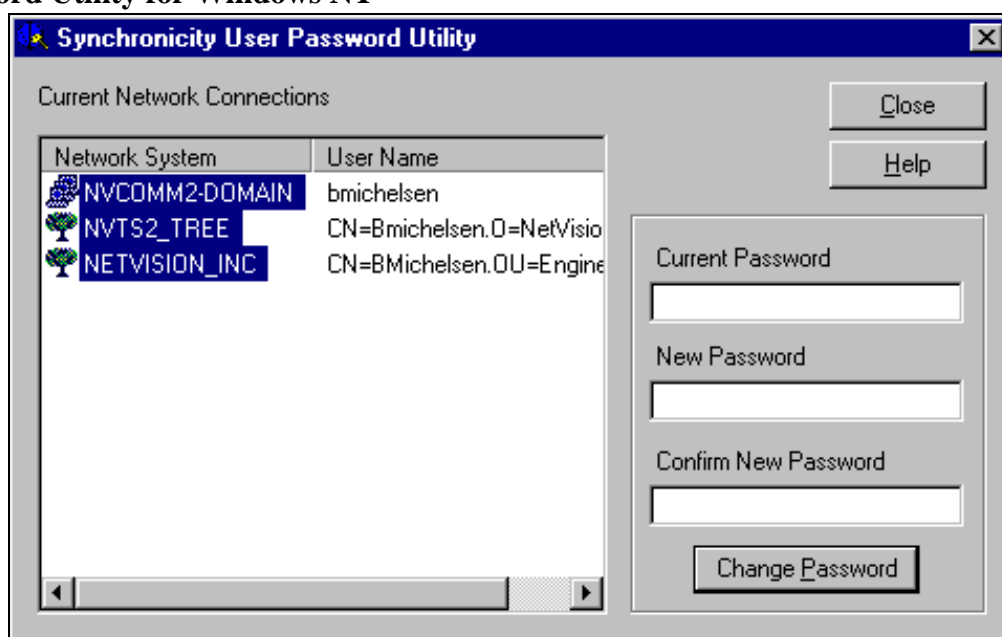


A dialog will then be displayed that indicates any problems that may have occurred during the password change process. Only errors directly related to changing the NDS or Synchronicity password will be reported. Any errors that occur when the synchronization agent is attempting to synchronize the password change will be reported in the standard mechanism for the synchronization agent. The Windows NT Event Viewer is used as the reporting mechanism for the Synchronicity for NT, Synchronicity for Exchange, and Synchronicity for Notes synchronization agents. The Synchronicity for NetWare 3 synchronization agent reports any problems in its log file.

# Windows NT User Password Utility

The Synchronicity User Password utility for Windows NT provides a mechanism to allow users to change their password in a manner that the password will be properly synchronized to all of the various systems by Synchronicity. Since this utility is a stand-alone application, it is not automatically invoked when a user's password has expired or if the user is forced to change their password at the next login. This utility can be easily called from a login script if a user's password is about to expire, instead of waiting for the Novell Client for Windows NT to request the password change. This utility functions in the same manner as the Windows 95/98 version but can also change the Windows NT account password directly.

Figure 2-7  
User Password Utility for Windows NT



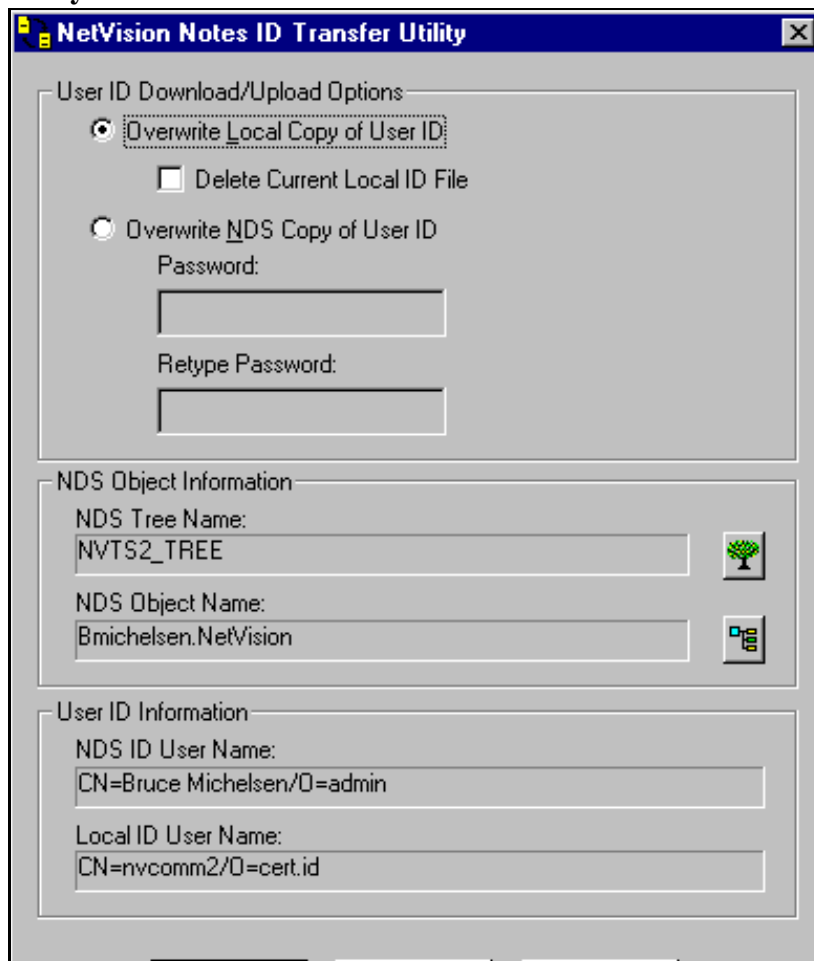
# Notes User ID Transfer Utility and Single Sign-On

The Notes User ID Transfer utility can be installed and the Single Sign-On enabled on machines running the Lotus Notes Client but that are not running the Synchronicity for Notes Service Agent.

## About the Notes ID Transfer Utility

Use the Notes ID Transfer utility to match a local User ID file and a corresponding User ID file stored in an NDS user account. (See Figure 2-8.)

Figure 2-8  
Notes ID Transfer Utility



When running the Notes ID Transfer utility, no dialog appears if the User ID files are the same. If the User ID files are different, specify which file to overwrite.

Before running the Notes ID Transfer utility, add your local User ID file to the Lotus Notes Links setting for your NDS user account. (For information on adding ID files in NDS user objects, refer to *Synchronicity for Notes Administrator Guide* or search *Synchronicity for Notes Help*.)

## Notes ID Transfer Utility Command-Line Options

You can use command-line options when running the Notes ID Transfer Utility.

### *-MatchName*

If the binary compare of the ID files fails, compares the user names internal to the ID files. The ID files are considered as matching if the user names internal to the IDs are the same. If a match is found, no dialog appears.

### *-TreeName*

Specifies the NDS tree to use when there are multiple connections. For example,

**-TreeName "my tree"**

### *-UserName*

Specifies the NDS user account to use when matching the stored User ID file instead of the logged-in account. For examples,

**-UserName "clayton williams"**

**-UserName "cwilliams"**

### *-NDS*

Automatically overwrites the local ID file with the ID file stored in NDS.

### *-Local[password]*

Automatically overwrites the ID file stored in NDS with the local ID file. You can optionally append the password.

### *-Delete*

Specifies that the current ID should be deleted first, if the local copy of the ID is to be overwritten. Use this option when using a single machine for multiple users to prevent the IDs from stacking up.

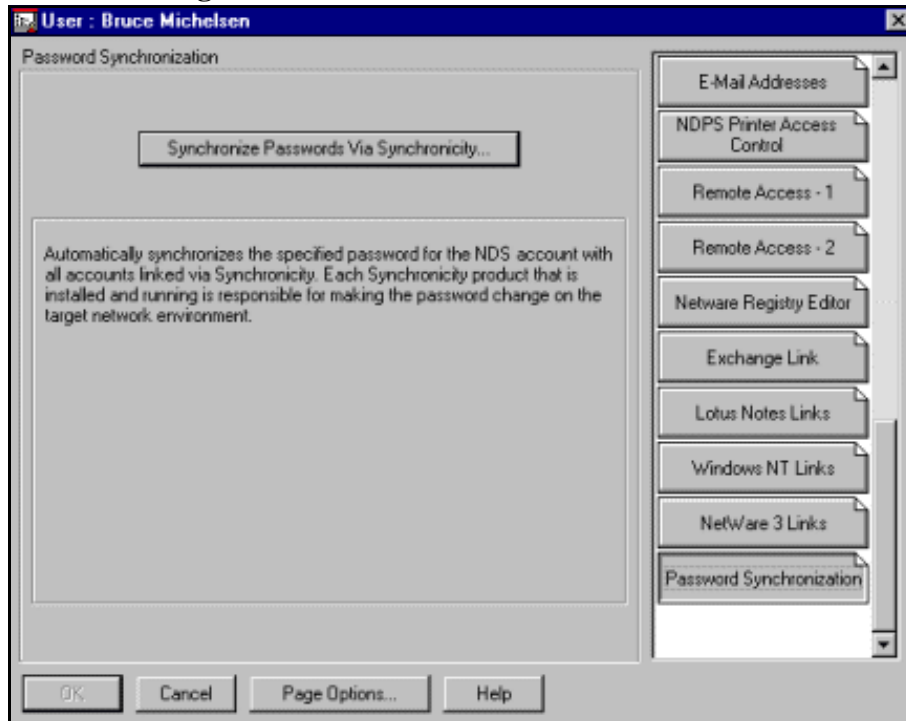
## **About Single Sign-On**

When the password in the local User ID file is the same as in the User ID file stored in NDS, after users authenticate to NDS and then run Lotus Notes Client they are automatically authenticated (by proxy) to Lotus Notes, and consequently, will not be prompted for their user password.

# NetWare Administrator Details Pages

A password change that is supported by Synchronicity can also be initiated from the Password Synchronization detail page that is added to the NDS User object in the NetWare Administrator program by the snapin modules supplied with the various Synchronicity products.

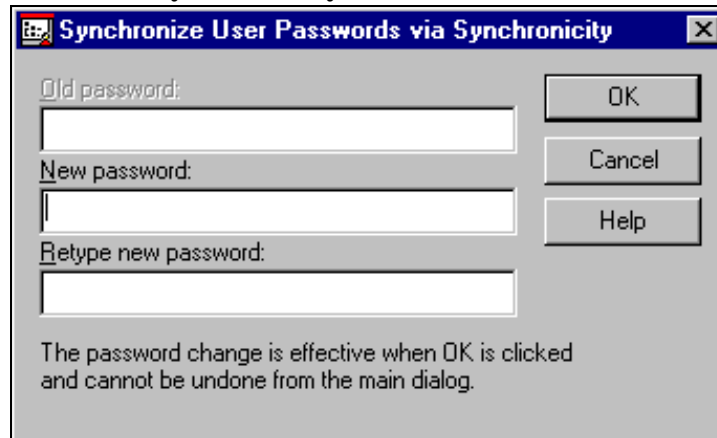
**Figure 2-9**  
**Password Synchronization Page**



Click Synchronize Passwords Via Synchronicity to type and confirm the password (see Figure 2-10).

Figure 2-10

### Synchronize User Passwords Via Synchronicity



For the NDS user, passwords will be synchronized for all accounts linked to NT, Exchange, Lotus Notes®, or NetWare 3 with running synchronization agents.

When passwords are synchronized to the Notes user account, only the HTTP password is changed. The password of any stored USER.ID file in NDS cannot be changed, due to limitations in Lotus Notes APIs.

## Password Change by Proxy

Synchronicity supports a Password Change by Proxy feature, available in the Synchronicity Administrator Password utility. The proxy password change allows network administrators and/or help desk personnel to be granted read, write, and compare rights to the NDS attribute named NetVisn:Synchron Password to change an NDS user's password using the Synchronicity Administrator Password utility. Whenever a Synchronicity synchronization agent detects that the Synchronicity password was changed and the person who made the password change does not have appropriate rights to change the NDS password for the same account, the synchronization agent will change the NDS password on behalf (by proxy) of the initiator of the Synchronicity password change. The Synchronicity for NT / Exchange and Synchronicity for Notes synchronization agents support this feature in version 1.51 and later. The Synchronicity for NetWare® 3 synchronization agent supports this capability in version 1.60 and later.

With Synchronicity for NT, the Manager of Users property page of the Synchronization Settings can be used to automatically assign the appropriate rights to a specified NDS user or group to be able to manage the Synchronicity password, as displayed in Figure 2-11. Rights to the Synchronicity password can also be granted manually in the Synchronicity Administrator Password utility, as described in “Administrator Password Utility” on page 8.



**Figure 2-11**  
**Manager of Users Property Page**

