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# AppNote: Novell Client 4.9 SP2 : Initialization, Login and Settings

## Novell Cool Solutions: AppNote By Earle Wells

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This article describes the operation of the Novell Client, from boot-up of the machine, through the user login. It discusses how the Client uses defined protocols to locate resources and authenticate a user. It also contains a comprehensive listing of the various settings available to control the behavior of the Client.

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## The Novell Client Initialization and Login Process

This descriptive analysis assumes the following general configuration:

- Novell Client 4.9 SP2
- Default (Typical) Installation
- LDAP Contextless Login enabled
  - Enable LDAP Contextless Login checked
  - Tree and Server names supplied
- Protocol: IP
- Name Service Providers enabled
  - NDS
  - Host File
  - DNS
  - SLP

## Machine Boot -- The First Steps

Unless a static IP address has been configured for the workstation, the first Novell Client-related event that happens when the workstation starts is a DHCP (Dynamic Host Configuration Protocol) broadcast request sent by the TCP/IP stack (not the Novell Client), in order to obtain an IP address. The reply from the DHCP server includes the following items:

- Assigned IP Address
- Server IP address
- Subnet mask
- Gateway address
- DNS address(es)

Now that the workstation has an IP address, it next sends an ARP (Address Resolution Protocol) packet. ARP is used to find the hardware address of a known IP address. In order to communicate with any other device on the network, you MUST know the Media Access Control (MAC) (also known as Data Link Control (DLC)) address of the target device. In this case, the workstation sends an ARP simply to determine if anyone else on the network has the address it has just been assigned. Hopefully, no one else does. If another workstation has the same address, the address conflict will need to be resolved before continuing.

Once the workstation has verified that it has a unique IP address, it is ready to begin learning about other resources available on the network. First, the workstation sends a DHCP Inform packet. This is sent as a broadcast, to inform every other device of the workstations MAC address. This broadcast occurs regardless of how the workstation received its IP address.

Another DHCP request is broadcast, asking for information available from the DHCP server. A key component of the Client's DHCP request is information concerning Service Location Protocol (SLP) settings. For more information about configuring SLP in the NetWare environment, see TID 10062474, "SLP Design and Implementation Guidelines."

The DHCP options that can be used to issue SLP configuration information are:

- 63 - (12, 13, 14) - CMD settings
- 78 - Directory Agent List. Valid entries are DNS names or IP addresses.
- 79 - SLP Scope. If this is not set, it will assume the UNSCOPED scope.

Other key Novell Client DHCP options are:

- 85 - Preferred Server
- 86 - Preferred Tree
- 87 - Name Context

With the typical configuration, the Client requests the following DHCP options:

- 78 - Directory Agent List
- 79 - SLP Scope
- 85 - Preferred Server

A DHCP server will then reply, providing information about these services.

At this time, the Client will issue an Internet Group Management Protocol (IGMP) report. SLP uses IGMP to join a multicast group. This is done with a multicast packet (sent to multicast address 224.0.1.22), with notifies its neighbors, "I am willing to accept multicast packets."

At this point, the Novell Login GUI is displayed on the workstation's monitor.

## **Tree, Server and Context Settings in the Novell Client**

The Novell GUI is one of three locations where the user can specify Server, Tree and Context settings. These include:

1. The Login GUI
2. The Client tab on the Novell Client Configuration panel

3. Within a location profile on the Location Profile tab on the Novell Client Configuration panel

## 1. The Login GUI

When the Advanced button is selected, the Login GUI provides fields for the Server, Tree, and Context. The information needed to authenticate must be supplied, or the login will fail. For example, if a username and password is specified without providing a tree or server, an error will be returned and the login will not be successful. Or, if a tree is specified without the user's context (and the user object does not exist in the partition root), the login will fail. Specifying either the tree or the server, along with the context, will allow for a successful login.

The Tree and Server fields can be populated in various ways. The obvious method of manually typing in accurate values will result in a successful login. However, these field can be completed using other methods including (without considering other products interfacing with the Client) location profiles, DHCP, and LDAP Contextless Login.

### Location Profiles

When a location profile is selected, the values in the Server, Tree, and Context fields are automatically used to populate the Login GUI. The default location profile is most commonly used, but additional profiles can be defined, and, when the Location List option is set on, the additional profiles can be selected from the Login GUI. If the Server, Tree, and Context values are subsequently manually changed in the Login GUI, they will be saved in the current location profile, overwriting the existing values. Location profiles are stored in

```
HKLM\Software\Novell\Location Profiles
```

This behavior is controlled by a configuration setting . Each location profile has a "Save Profile after successful login" option.

### DHCP

The Client can query DHCP to populate the Server, Tree, and Context fields. This requires a DHCP server properly configured to deliver DHCP options 85, 86, and 87, which correspond to the Server, Tree, and Context fields, respectively. These options are set on the Client on the DHCP Settings tab on the Novell Client Configuration panel. This tab also allows you to set the Login Service to which you want these values applied. Note that DHCP-delivered values first populate the location profile which, in turn, populates the Login GUI. The values are then saved for the location profile, assuming that the "Save profile after successful logon" option is set on in the location profile.

### LDAP Contextless Login

When this option is properly configured, the LDAP Contextless Login extension will populate the values for the User, Tree, and Context fields. If the LDAP lookup is successful, and only one matching entry is found for the specified user, the fields are automatically populated, and the user need only present his/her password in order to login. If multiple matching entries are found, a popup box is presented with the choices, from which the user can select the appropriate entry. As with the DHCP option, the values are saved in the location profile, assuming that the "Save profile after successful logon" option is set on in the

location profile. For more information about LDAP Contextless Login, see *Taking Things Out of Context: Using LDAP Contextless Login in Your Network*, in the September 2003 issue of Novell AppNotes. See <http://developer.novell.com/research/ebooks/September2003.pdf>.

## 2. The Client tab on the Novell Client Configuration panel

This pane provides fields for the Preferred Server and Preferred Tree settings. While the interface for the 95/98 and NT/2K/XP clients is the same, the functionality of these fields is different between these clients. For the NT/W2K/XP client, these fields are used only to populate the choices in the drop-down list on the Login GUI. That is, if values are stored in the Preferred Server or Preferred Tree fields, they will do nothing except provide that value as a choice when, on the Login GUI, the user clicks the down arrow on the Tree or Server fields (visible when the Advanced button is selected). These values are stored in

`HKLM\System\Current Control Set\Services\NetwareWorkstation\Parameters`].

## 3. Within a location profile

As described above, values can be stored in location profiles defined on the Location Profile tab on the Novell Client Configuration panel. The default profile is commonly used. If configured, these values will automatically populate the corresponding fields in the Login GUI.

### What Happens Next

Assuming that the Server and Tree fields are both completed, the Client will attempt to locate first, the Server, then, if that is unsuccessful, the Tree, using the name providers selected in the Protocol Preferences tab on the Novell Client Configuration panel. If only the Server or Tree field is provided, the Client uses that information to attempt to make a connection to the resource.

The Client forms requests to locate services based on the information provided. For example, if the Server field contains a DNS name of the server (such as "SERVER1", defined in the DNS server as representing FQDN "SERVER1.NOVELL.COM"), the Client will attempt to first identify the corresponding IP address, then ARP for the MAC address corresponding to that IP address, in order to make a connection with that resource. If, on the other hand, an IP address is provided in the Server field, the Client simply ARPs to get the server's MAC address, and then goes on to establish the connection.

The Client will begin communicating with a Directory Agent (DA). It learned the IP address of the DA from the DHCP server, in response to the Option 78 request. (Or, if DHCP is not configured to provide the answer, another method will be utilized, including a statically configured address, or through a multicast request.) The Client issues an SLP Service Request as a unicast to the DA (or DAs, if multiple entries were returned from the DHCP server). The DA responds with information about itself, including language, encoding, URL, and a scope list.

Earlier in the process, the DHCP server provided the workstation with the address of the DNS server.

The Client is now ready to begin discovering the resources needed to authenticate and login to the network. To do this, it will use the Name Service Providers which have been enabled. In the typical installation, these include NDS, Host File, DNS, and SLP.

These Name Service Providers are associated with the "Preferred Network Protocol" on the "Protocol Preferences" tab of the Novell Client Properties page. The Client will cost the Name Service Providers (also referred to as "Protocol Component Settings") according to the Preferred Network Protocol setting specified. For example, if "IP" is the preferred network protocol, the Name Service Providers enabled for IPX will be costed higher than those for IP. This functionality has been improved in the 4.9 version of the Client over what was available in the 4.83 version.

Unlike the 95/98 client, the 4.9 SP2 Client does not list the protocol component settings in any order, and there is no default order. Also, the 4.9 SP2 Client is designed to query all name providers at the same time, potentially improving performance over the 95/98 client, which did these operations serially.

So, in no particular order, and at about the same time, the workstation now sends requests to the DNS server, and SLP, requesting the tree name defined in the currently used location profile.

The Client never makes network requests for any Host File information since this file is local to the workstation. The "Host file" name resolution method uses the "HostFile" value under [HKLM\SYSTEM\CurrentControlSet\Services\NWHOST\Parameters] to define which file will be used. The default/only value ever asserted here is the %SystemRoot%\System32\drivers\etc\hosts file, which is the same file most Windows TCP/IP services will also be using.

NDS will not be used as a name resolver at this point, since there is no known NDS resource available. Later, after the user is authenticated and NDS is available, it will be used for name resolution.

The Client will utilize the information obtained from the first Name Service Provider to respond with valid information. For example, if the Client were to request information to locate a resource via DNS and DNS fails to locate the object, the Client would look to another of the configured name service providers to locate the desired resource.

Referring to DNS specifically, if DNS cannot locate a name, it will strip off the topmost domain name and retry the request. For example, after failing to locate "my\_tree.provo.novell.com", it would try "my\_tree.novell.com". If this is unsuccessful, no further attempts would be made.

The Client makes these requests to several name providers at once. All Name Service Providers will return the same information, so it doesn't matter if multiple responses are returned from different name providers. The Client will use the first one received and ignore the other responses. There is no mechanism to cancel pending requests.

For example, an SLP request will be made in a UDP packet sent to the DA on port 427. The Client will be looking for the service

```
ndap.novell/(svcname-ws==<tree_name>).(svcname-ws==*.<tree_name>.)//
```

Where ndap = Novell Directory Access Protocol

Another SLP request may be made for

```
bindery.novell//(svcname-ws==<tree_name)/
```

The DA will reply with

```
url: service.ndap.novell:///<tree_name>
```

Next, the Client will make another request to the first DA which responded, this time asking for the IP address of the replica server. This attribute request will be in the form

```
svcaddr-ws for service:ndap.novell:///<tree_name>
```

The DA will then reply with the IP addresss of the replica server.

As was mentioned earlier, the workstation needs the MAC address of the server in order to communicate with it. To get the address, it sends an ARP broadcast packet.

The DA may return information about multiple replica servers (multiple entries can be returned in a single packet). Because of this possibility, the Client needs to find which replica server is "closest" in order to find the most effective communication path. To do this, it costs the routes using the Internet Control Message Protocol (ICMP) protocol. These "IP Costing" packets can be distinguished by the string "Novell Net Service Route Request" contained in the packet data. If IP Costing is not enabled the Client simply uses the first address returned by the DA (or the first IP address on the list if the DA returns more than one in a response). For more information about IP Costing, See the entry for "IP Address Costing" in the Appendix of this document. See also TID 10053626.

Now, with the MAC address of the "nearest" replica server, the Client workstation is ready to establish an NCP connection with that server. First, a TCP connection must be established. This is accomplished with the "three way handshake" (SYN-SYN-ACK). As part of this handshake, the Client makes a request to communicate with the server on a certain port number (524). Since the server is listening on this port, a response is sent back to the requesting Client.

Common ports used by Novell software are documented in TID 10071836.

To create the NCP service connection, the Client issues an NCP Connection Request (0x1111). The server responds, issuing a connection number for the Client workstation to use during that session.

The workstation then requests and receives information from the server, about the server. The include items such as:

- Maximum Packet Size
- File Server Name
- File Server Version
- File Server features offered
- NCP Service Network Addresses

Next, the Client needs to be able to query the server. To accomplish this, the Client workstation sends a "Ping for NDS NCP" request. NDS on the server responds with the tree name, the NDS version, and the distance from the root most entry on that server.

Presented with the Novell Login GUI, the user enters the username (if not already defined in the location profile) and presses <TAB> (or clicks the mouse) to move to the "password" field. This action triggers the Lightweight Directory Access Protocol (LDAP) Contextless Login sequence. This sequence consists of the following steps:

1. Using DNS, locate the LDAP server configured in the Novell Client Properties.
2. Create a TCP connection with the LDAP server.
3. Obtain the needed LDAP information, using the following steps:
  - Bind
  - Search for treename
  - Search for username
  - Unbind
4. Tear down the TCP connection to the LDAP server.

By default, the LDAP Contextless Login feature included in the 4.9 and higher client will search the entire tree for matching usernames and return ALL user names. This is desirable for many scenarios. However, a registry setting, "Search all scopes", documented in the *Novell Client Settings* section of this document (also TID 10093044), enables a feature that limits the LDAP Contextless Login search to a context or a context and its Subtree. The ability to narrow the search scope benefits organizations that span WAN links or large tree designs. Additionally, multiple scopes can be configured for one client. The default behavior in a multi-scope LDAP Contextless Login configuration is to search all scopes and return all matching usernames. Some environments will find that continuing to search for usernames in all scopes even after a match has been found to be inhibitive due to slow WAN links and large trees.

The option entitled "Enable LDAP Context Search Scope (previously referred to as "Context Pruning") allows you to limit the search scope to a specific context or to a specific context and subtree.

The Client now uses NDS to authenticate the user. During this process, the Client makes a number of NDS requests to get information about the user object. Part of this process involves the NDS public and private keys.

Public key encryption uses two keys, one to encrypt and the other to decrypt. The network entity that will receive messages (in this case, the server) generates a key pair and distributes the public key. Services that send encrypted messages must do so with the public key, and the holder of the private key can then decrypt the messages.



With the public key, it is possible to encrypt messages to a client that possesses the matching private key, and only the private key can decrypt the messages encrypted with the public key. Since only one person has the private key, only one person can decrypt your messages.

Conversely, a sender can encrypt data using the private key. The recipients of this message use the public key to decrypt the message. If the decryption is successful, the recipient can be sure that the message was encrypted with the corresponding private key. In this case many people can decrypt the message, but only the holder of the private key could have generated the message.

The exchange follows this pattern:

Begin Login (This process establishes a login session.)

1. Client sends request to login to NDS and passes the users NDS EID (Entry ID, a unique identifier assigned to each object in NDS) in the request.
2. The server reads its private key from NDS and then encrypts the login data. This data is sent back to the client making the request for login.
3. The client then resolves the server object from NDS to acquire the servers NDS EID. After the server returns the servers NDS EID the client makes another request to read the public key attribute for the NDS EID of the server.
4. The client takes the supplied Public Key and decrypts the login data that was sent by the server in response to the login request.

Finish Login (This process validates the user's credentials.)

1. The client makes a request to the server to finish login. Within the request is the user credentials and login data. All of this information is encrypted via the server's public key.
2. The server reads its private key from NDS and then decrypts the client credentials and login data. If successful then NDS will then reply with validated login information. This data is encrypted with the user's private key. If the user credentials do not match what is stored in NDS then the login session will be terminated and an error returned.
3. The client must now resolve the user object to retrieve the NDS EID for the user object. The client will then use the NDS EID supplied to request to read the public key attribute of the user object. This is due to the fact that the last server message was encrypted with the user's private key. This process ensures that not only the proper username and password combination was passed but also that the key pairs match. It could be possible for two different users to have the same username and password at different levels of the tree.
4. The NDS server returns the users public key. The client takes this public key and decrypts the finish login request encrypted data.

Begin Authentication (This process establishes an authentication session.)

1. The client now needs to get the servers public key attribute again so that it can pass more encrypted data back to the server. The data passed is generated from the login data received during the login process. The keys are not cached beyond the current key so since we had read the users public key prior to needing the servers public key we will need to make this request

again. The reason we do not cache keys pairs are because there is no guarantee that they will not change in NDS since it is loosely consistent.

2. The NDS server sends back the servers public key attribute.
3. The client encrypts it's begin authentication data with the servers public key and then sends it to the NDS server.
4. The server reads the private key attribute of the server object and then decrypts the authentication data supplied by the client. If successful the server will again encrypt authentication data with the server's private key and then send it back to the workstation. If this process fails then the authentication process is terminated and an error is returned.

Finish Authentication (This process validates that NDS can acquire an NLS (Novell Licensing Services) license and authenticate the user to the tree.)

1. The client takes the authentication data and encrypts it with the server's public key.
2. At this point the server reads from NDS the private key attribute of the server object in NDS and decrypts the finish authentication data. NDS will then attempt to establish a session with NLS and acquire a license in the tree. If no license is available or NLS fails then the authentication will fail and an error returned to the client. This is typically the 0x8901 error. If the license can be acquired the NDS database will return a success.
3. At this point the client has logged in to NDS and authenticated. Now we are ready to establish a licensed connection to the NCP server. We already have a connection to the NDS server so we just issue an NCP request to change connection state from temporary to licensed.

It is important to note that the actual password is never sent across the wire, nor stored in eDirectory. The private key in eDirectory is a hash that was generated by the password. The password is a seed for the hash. When a user types in their credentials at the client, the password is used along with the public key to create the encrypted message. The encrypted message is sent to the server. The server does not care what the message is, just that it can decrypt it using the private key that is stored on the user object (which is a hash that was originally created using the same password) and the public key. If the decryption is successful, NDS assumes that the correct password was used to encrypt the message.

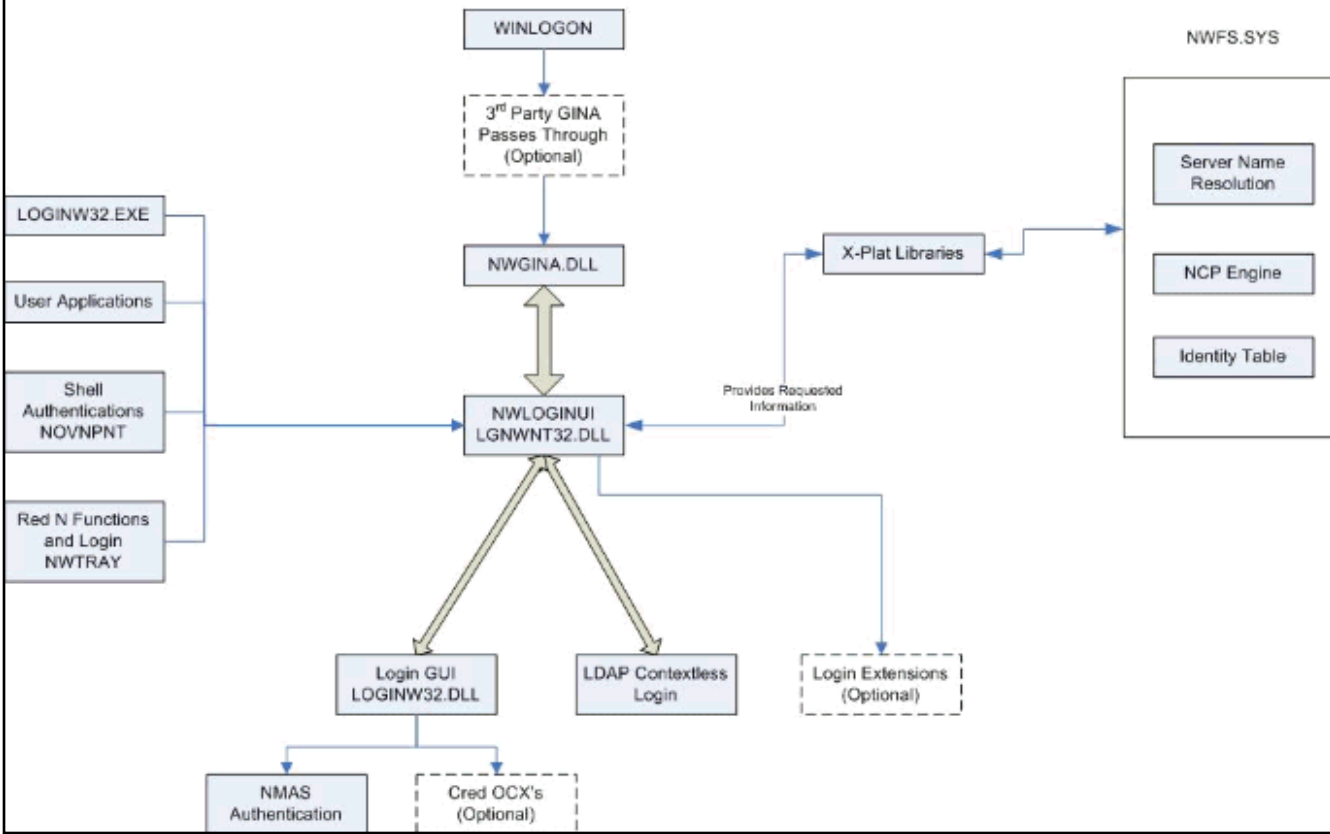
After the successful exchange of encryption data, the Client requests that the server change the user's connection state from "temporary" to "logged in." Finally, the Client uses NDS to read other User attributes such as full name, login script, etc. The login script is executed, which completes the login process.

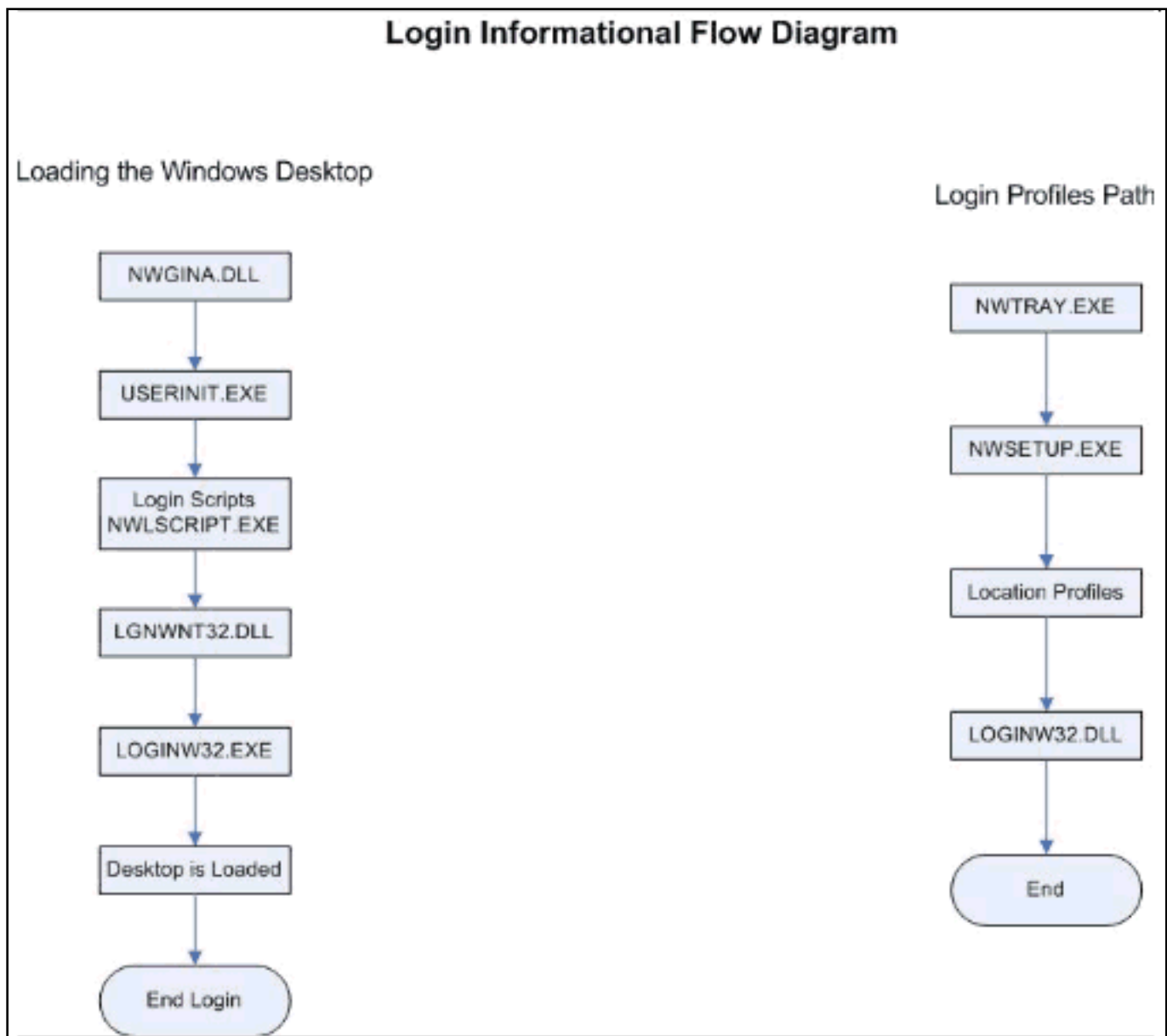
Earlier in this document, we discussed how the Name Service Providers are used to locate resources. After successfully authenticating, the NDS Name Service Provider is routinely used to locate services. For example, when mapping a drive to a server to which no connection has been established, the Client will use NDS along with other Name Service Providers to resolve the name.

Below are diagrams which provide a high-level overview of the login process within the Novell Client.

### Login Informational Flow Diagram

Login Authentication and Unlock Workstation





The three main components involved in the login process are NWGINA.DLL, LGNWNT32.DLL, and LOGINW32.EXE. While the interaction between these components is very complex, a simple way to understand their major functions is as follows:

NWGINA.DLL -- interfaces with the Microsoft operating system

LGNWNT32.DLL -- interfaces with NetWare

LOGINW32.EXE -- interfaces with the user

USERINIT.EXE is a Microsoft component that plays a key role in starting the other modules, and in ultimately launching the Windows desktop.

This diagram on the right deals with configuring the location profiles.

NWTRAY.EXE is the red "N" seen in the system tray. When the "Novell Client Properties" item is selected, NWSETUP.DLL is used.

LOGINW32.EXE provides the user interface for using the profile.

For additional details about how the Novell Client operates during a user login, see TID 10096674.

## Section 2: Novell Client Settings

This section documents many of the settable parameters which control the behavior of the Novell Client. It is organized under the following sections, corresponding to the tabs on the Novell Client Configuration page.

Client Tab

Location Profiles Tab

Advanced Login Tab

Service Location Tab

Advanced Settings Tab

Advanced Menu Settings Tab

Default Capture Tab

Protocol Preferences Tab

LDAP Contextless Login Tab

Single Sign-on Tab

DHCP Settings Tab

DSCAT Contextless Login Tab

Update Agent Tab

Keys not settable via Client Properties

Each setting is presented in the following format:

Setting Name:	Typically, the name as presented in the Novell Client Properties pages.
Logical Value Type:	The logical type of the setting (Number, ON/OFF, etc.).
Range From:	The lowest value allowable for this setting.
Range To:	The highest value allowable for this setting.
Default Value:	The default value used by the Novell Client when newly installed.
Registry Key:	The location in the registry where this setting is stored.
Registry Value Name:	The exact name as entered in the registry.
Default Registry Data:	The data stored in the registry when the Novell Client is newly installed.
Registry Value Data Type:	The data type for this setting (DWORD, REG_MULTI_SZ, etc.)
Help/Comment:	Help text available in the Novell Client Property pages, and additional information which may be helpful in understanding the purpose and operation of the setting.

### Client Tab

Setting Name: First Network Drive\*

Logical Value Type: Number  
 Range From: 0x00000001  
 Range To: 0x0000001a  
 Default Value: 0x00000006  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Parameters]  
 Registry Value Name: First Network Drive  
 Default Registry Data: 0x00000006  
 Registry Value Data Type: DWORD  
 Help/Comment: This parameter sets the first network drive to the drive letter of choice when you connect to a NetWare server. The first network drive applies to any user logging in to the network using the workstation where it is set.

Setting Name: Preferred Server  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM  
 \CurrentControlSet\Services\ NetWareWorkstation  
 \Parameters]  
 Registry Value Name: Preferred Server  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING  
 Help/Comment: The help text is wrong. This setting does nothing in the 4.9 client except to populate an entry in the server dropdown list of the Novell Login GUI.

Setting Name: Preferred Tree  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM  
 \CurrentControlSet\Services\ NetWareWorkstation  
 \Parameters]  
 Registry Value Name: Preferred Tree  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING

Help/Comment: The help text is wrong. This setting does nothing in the 4.9 client except to populate an entry in the tree dropdown list of the Novell Login GUI. For ZEN4 and above, the tree is used for workstation manager if the import process uses user information to create the object. If user information is not required to create the workstation object, then this is not used.

Setting Name: Product name  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NetWareWorkstation\CurrentVersion]  
 Registry Value Name: ProductName  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING  
 Help/Comment:

Setting Name: Version  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NetWareWorkstation\CurrentVersion]  
 Registry Value Name: MajorVersion + MinorVersion + Service Pack + BuildNumber  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING  
 Help/Comment:

Setting Name: ACU version  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NetWareWorkstation\CurrentVersion]  
Registry Value Name: MajorInternalVersion + MinorInternalVersion  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Support Pack Files (button)

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NetWareWorkstation\CurrentVersion]

Registry Value Name: Service Pack Files + Services Pack Files 2 + Service Pack Files 3, etc.

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment:

Setting Name: Tree-name context pairs

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NetWareWorkstation\Parameters\Trees]

Registry Value Name: Key N/A

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Specifies the location of each User object in the eDirectory tree for NetWare 4 and later users using NDS. It does not apply if you are logging in to a NetWare 3 server or a NetWare 4 server using bindery services.

The name context applies to any user logging in to a specified tree using this workstation. Because it is possible to log in to multiple trees, each tree has its own designated name context. You can change the tree and the name context when you log in. However, a user can have only one name context in any one tree.

Value is treename, valuedata is context.



**Location Profiles Tab (registry locations refer to the default profile)**

Setting Name: Save Profile after successful login  
 Logical Value Type: OFF/ON  
 Range From: N/A  
 Range To: N/A  
 Default Value: ON  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
 \Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default]  
 Registry Value Name: Save On Exit  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: If this box is checked, then the profile will be changed to reflect the last set of information used to log in. This includes all the information on the Novell Login tabs such as context, tree, and script settings.

Setting Name: Credentials  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: "Credentials"  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
 \Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default]  
 Registry Value Name: Tab  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING  
 Help/Comment: Inactive tabs do not take up a space.

Setting Name: Credentials - username  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
 \Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default]  
 Registry Value Name: UserName  
 Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment:

Setting Name: Password Enable

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default]

Registry Value Name: Password Enable

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Specifies whether or not the password field appears in the login GUI.

Setting Name: NDS Active Authenticator

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: "NDS"

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab1]

Registry Value Name: Tab

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Used by NDS and Bindery tabs. Set to "NDS" or "Bindery." NDS OR  
Bindery can be active, not both.

Setting Name: NDS Tree

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab1]

Registry Value Name: Tree  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: No default, but set during installation?

Setting Name: NDS Context  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab1]

Registry Value Name: Context  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: NDS Server  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab1]

Registry Value Name: Server  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Used by NDS and Bindery tabs.

Setting Name: Clear Current Connections  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: 1

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab1]

Registry Value Name: Clear Connections

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment:

Setting Name: Script Enable Tab

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: "Script"

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]

Registry Value Name: Tab

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Shows the information displayed on the Script Tab of the login panel.

Setting Name: Script Run Scripts

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]

Registry Value Name: Login Script

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: What does "default login script" indicate?

Setting Name: Script Display Results Window

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Display Results  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment:

Setting Name: Script Close Automatically  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Close Results  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment:

Setting Name: Script Login Script  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Script File  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Script Profile Script

Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Profile Script  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Login Script History  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\ History\Scripts]  
Registry Value Name: 1, 2, etc.  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Profile Script History  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\ History\Profiles]  
Registry Value Name: 1, 2, etc.  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Variable2  
Logical Value Type: STRING

Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Variable2  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Variable3  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Variable3  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Variable4  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Variable4  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Variable5  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab2]  
Registry Value Name: Variable5  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Windows Tab  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: NT Credentials  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab3]  
Registry Value Name: Tab  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Windows Local Username  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab3]  
Registry Value Name: DefaultUserName  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: no default as such, may be Administrator.



Setting Name: Windows Domain  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab3]  
Registry Value Name: DefaultDomainName  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Dial-up Enable Tab  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: Dialup  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab4]  
Registry Value Name: Tab  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Shows the information shown on the Dial-Up Networking (DUN) tab of  
the login panel.

Setting Name: Dial-up Login using DUN  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab4]  
Registry Value Name: Enable RAS  
Default Registry Data: None (value not present in registry by default)

Registry Value Data Type:     DWORD

Help/Comment:

Setting Name:                 Dial-up Phonebook entry to dial

Logical Value Type:         STRING

Range From:                 N/A

Range To:                    N/A

Default Value:               No Default Value

Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab4]

Registry Value Name:         Dialup Entry

Default Registry Data:       None (value not present in registry by default)

Registry Value Data Type:    STRING

Help/Comment:

Setting Name:                 Dial-up Dialing from

Logical Value Type:         STRING

Range From:                 N/A

Range To:                    N/A

Default Value:               No Default Value

Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab4]

Registry Value Name:         Dialup From

Default Registry Data:       None (value not present in registry by default)

Registry Value Data Type:    STRING

Help/Comment:

Setting Name:                 NMAS Enable Tab

Logical Value Type:         STRING

Range From:                 N/A

Range To:                    N/A

Default Value:               NMAS

Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab5]

Registry Value Name: Tab  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Shows the information shown on the NMAS tab of the login panel.

Setting Name: NMAS Sequence (drop down list)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Nmas\1.0\ Requested  
\Methods]

Registry Value Name: 0,1,etc  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Valuedata is name of method. You should enter your NMAS Methods  
in the first box, the name should be numeric, starting at Zero, and the  
value is the name of the method e.g.  
0 NDS  
1 Simple Password  
The NMAS Sequence should contain the name of the method to  
appear by default in the NMAS method box.  
The Same applies for Clearances.  
  
If you go back to check the list of values, you will find that Selected  
Method/Selected Clearance is shown in the list, and can be safely  
removed, as it will be added back automatically.

Setting Name: NMAS Sequence  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Nmas\1.0\ Requested  
\Methods]  
Registry Value Name: Selected Method  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Name of selected method -- must be in drop down list.

Setting Name: NMAS Clearance (drop down list)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Nmas\1.0\ Requested  
\Clearance]  
Registry Value Name: 0,1,etc  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Valuedata is name of clearance.

Setting Name: NMAS Clearance  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Nmas\1.0\ Requested  
\Clearance]  
Registry Value Name: Selected Clearance  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Name of selected clearance -- may not be in drop down list.

Setting Name: NMAS Display clearance field  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Location Profiles  
\Services\{1E6CEEA1-FB73-11CF-BD76-00001B27DA23}\ Default  
\Tab5]  
Registry Value Name: display clearance  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment:

Setting Name: NMAS Log NMAS Client Activity  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NMAS\1.0]  
Registry Value Name: log enable  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment:

Setting Name: NMAS Log NMAS Client Activity logfile (button)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NMAS\1.0]  
Registry Value Name: log file  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

## Advanced Login Tab

Setting Name: Advanced Button  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Advanced  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Advanced button on the Login dialog is enabled. This button leads to various tabs that help you to specify advanced login parameters.

Setting Name: Allow Dots in NetWare Username  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Dots In Name  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If this setting is on, any periods entered in the NetWare username will be treated as part of the name, rather than as context delimiters. The user will not be able to enter the context as part of the username, but will have to enter it separately. This makes it possible for the user to login with a username such as 'John.Smith' to both NetWare and Windows.

Setting Name: Bitmap Filename  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: NWELCOME.BMP  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Welcome Screen]  
Registry Value Name: Bitmap  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies the bitmap that appears on the Windows NT/2000/XP welcome screen. You can specify any bitmap located in the Windows NT/2000/XP directory. You can also leave the field blank if you don't want to use a bitmap.

Setting Name: Caption  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: Begin Login  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Welcome Screen]

Registry Value Name: Header Message  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Use this option to specify the text that appears in the Windows NT/2000/XP welcome screen title.

Setting Name: Clear Connections  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Clear Connections  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Clear Connections checkbox appears on the Login dialog. The checkbox allows you to clear all previous connections when you create a new connection to the network.

Setting Name: Context Box  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\TAB SETTINGS \NDS]  
Registry Value Name: DisableContext  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Checkbox on screen is "on", when disable is "off" Specifies whether the Context is displayed on the Login dialog.

Setting Name: Context Browse Button  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\TAB SETTINGS\NDS]  
Registry Value Name: DisableContextBrowse  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Checkbox on screen is "on", when disable is "off" Specifies whether the Context Browse button is displayed on the Login dialog.

Setting Name: Copy NetWare Username to Windows  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\TAB SETTINGS\NT Credentials]  
Registry Value Name: Sync NDS Username  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If this setting is on, whatever is entered in the primary (NetWare) Username field is copied into the Windows Username field, regardless of what might already be there. This setting has no effect when logging in Workstation Only, nor does it have any effect when doing a secondary login (from the Red N). Note that if the Windows Username is blank, this happens without this setting, but once the value has been set by a successful login, it will persist with that value, unless the location profile mandates that the name be blank. This setting makes it possible for an administrator to set up duplicate usernames in both NDS and Windows and the user can then log into both with a single entry. This setting provides support for UPN syntax and using dots in NDS usernames.  
  
See TID 10083253

Setting Name: Default Policy Support  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Policy Support]  
Registry Value Name: Check Default



Default Registry Data: 0x00000000  
Registry Value Data Type: DWORD  
Help/Comment: After the user logs in to the network with NetWare Login, the authentication server's \sys\public\winnt directory is searched for ntconfig.pol file. If the file is found, the policy is applied to the user and workstation.

Setting Name: Force Logoff Button  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\nwgina\Login Screen]  
Registry Value Name: ForceLogoff  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Value is treename, valuedata is context Specifies whether the Force Logoff button is displayed on the Login dialog when the workstation is locked. Force Logoff allows you to terminate the previously logged in user's Novell Client session even if he locked the workstation.  
Warning: Any unsaved work that the previous user had open will be lost. To maintain open applications and current network connections, log in using the previously logged in username and password.

Setting Name: Initial Novell Login  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON (0)  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\nwgina]  
Registry Value Name: PassiveMode  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: To disable the initial Novell login window, when the workstation is started, uncheck this box.

Setting Name: Location List  
Logical Value Type: OFF/ON  
Range From: N/A

Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Location  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Location list on the Login dialog is enabled. The list shows recent places where the user has logged in.

Setting Name: NMAS Authentication  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: NMAS Authentication  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If this setting is on, Novell Modular Authentication Services (NMAS) is enabled during login. NMAS authentication adds additional security to the network. However, if your network does not use NMAS, login may take additional time and you might want to disable NMAS authentication by changing this setting to off.

Setting Name: OEM Extended ASCII Password  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: OEM Password  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

**Help/Comment:** If this setting is on, the use of the OEM extended ASCII characters in passwords is enabled. You should only use OEM extended ASCII characters if you have legacy software that requires you to use the OEM Code Page. The latest versions of Novell Client support extended ASCII characters using the UNICODE code page and do not need this setting to be enabled in order to handle special characters such as s Ñ, or €.

**Setting Name:** Policy Path and Filename

**Logical Value Type:** STRING

**Range From:** N/A

**Range To:** N/A

**Default Value:** WS\System32

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Policy Support]

**Registry Value Name:** Policy Path

**Default Registry Data:** \\System32

**Registry Value Data Type:** STRING

**Help/Comment:** To specify your policy path and filename, enter the path to your policy file in this setting. The path must be a valid UNC path. UNC-style pathnames do not use the usual MS-DOS pathname convention (drive:\directory). Instead, use the following format: \server\volume\dir1\dir2\filename.ext

**Setting Name:** Remember WS Only

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]

**Registry Value Name:** Remember WS Only

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** Determines whether or not the Workstation Only checkbox will remember the previous setting that was used. Setting this parameter to On causes the Workstation Only checkbox to remember the previous setting. Setting it to Off causes the Workstation Only checkbox to use the Workstation Only Default parameter value.

**Setting Name:** Server Connection Retries

Logical Value Type: OFF/ON  
Range From: 0  
Range To: 60  
Default Value: 5  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Max Retries  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This parameter controls the number of times that Login will try to establish a connection to a server. If Login tries to connect to a server and fails, it will wait 1 second and then try to connect again. It will continue to do this until the number of retries has been reached. It is recommended that this setting be no higher than 20.  
  
See TID 10086052.

Setting Name: Suppress single sign-on for this login  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Show SSO  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Suppress single sign-on for this login checkbox appears on the Login dialog. This checkbox only appears on the Login dialog if the Novell single sign-on product is installed on the workstation. The checkbox allows you to disable the single sign-on process for the current login attempt.

Setting Name: Tree Box  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\ TAB SETTINGS\NDS]  
Registry Value Name: DisableTree

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Checkbox on screen is "on", when disable is "off" Specifies whether the Tree is displayed on the Login dialog.

Setting Name: Tree Browse Button  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\ TAB SETTINGS\NDS]

Registry Value Name: DisableTreeBrowse  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Checkbox on screen is "on", when disable is "off" Specifies whether the Tree Browse button is displayed on the Login dialog.

Setting Name: Variables Button  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: variables  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Variables button on the Login dialog is enabled. The button allows you to enter login script variables to be used when the user logs in.

Setting Name: Workstation Only  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]

Registry Value Name: Workstation Only  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies whether the Workstation Only checkbox appears on the Login dialog. The Workstation Only checkbox is used to log in to the Windows workstation without logging in to the NetWare network. Setting this to "0" will cause the "Workstation Only" checkbox to not be displayed, so that the user MUST log into NetWare.

Setting Name: Workstation Only Default  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Default WS Only  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This is the default value for the Workstation Only checkbox. This parameter only applies when the Remember Workstation Only Setting parameter and the Workstation Only if not connected parameter are both set to Off.

Setting Name: Workstation Only if not connected  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Check Workstation Only if Disconnected  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This parameter causes Login to check the network connection status and set the Workstation Only checkbox accordingly. If this parameter is set to On and Login cannot determine that a valid network connection exists, it checks the Workstation Only checkbox. If this parameter is set to Off, Login does not attempt to determine the network connection status.

Setting Name:	Workstation Only login after network login
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	OFF
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\Login]
Registry Value Name:	Workstation Only Fallback
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	Determines whether or not a Workstation Only login is attempted if the login to the network fails. Setting this parameter to On causes a Workstation Only login to be attempted if the network login fails. Setting it to Off skips the Workstation Only login after a network login failure.

## Service Location Tab

Setting Name:	Scope list (list)
Logical Value Type:	List
Range From:	N/A
Range To:	N/A
Default Value:	No Default Value
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\SRVLOC\Parameters]\Scope
Registry Value Name:	0,1,etc
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	value is name of filter
Help/Comment:	<p>This is a list of scope names to be reported to SLP applications on this workstation. Multiple scope names are allowed. The list order reflects the preference order. Scopes can also be configured via DHCP or discovered dynamically from Directory Agents.</p> <p>A scope is like a collection of services within a logical group. You might want to use a scope to create a group of directory agents and services registered with these directory agents in a large organization.</p>

Setting Name:	Static
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A

Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]  
Registry Value Name: Static Scopes  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Check the Static check box if you don't want the list to be  
supplemented by scopes that are discovered dynamically from  
Directory Agents.

If you check the Static check box for the Directory Agent list, SLP  
requests will be sent to the Directory Agents whose addresses or  
DNS names have been configured in the list. Otherwise, SLP will  
send request to all Directory Agents advertised in the network.

Setting Name: Filters (Button)  
Logical Value Type: Key N/A  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: N/A  
Registry Value Name: N/A  
Default Registry Data: None (value not present in registry by default)  
Value Type:  
Help/Comment:

Setting Name: Registration Filter Scope List (list)  
Logical Value Type: List  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]\RegScope  
Registry Value Name: name of filter  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING



Help/Comment:	filter list is 0,1,etc with value being Filtered Service Type List entry This is a list of registration filter scope names that will be reported to SLP applications on this workstation. Multiple scope names are allowed. When registering services, this list is used in addition to the general Scope List already created.
Setting Name:	Filtered Service Type List (list)
Logical Value Type:	List
Range From:	N/A
Range To:	N/A
Default Value:	No Default Value
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]\RegScope\<>name of filter<
Registry Value Name:	0,1,etc
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	STRING
Help/Comment:	value being Filtered Service Type List entry This is a list of registration filter scope names that will be reported to SLP applications on this workstation. Multiple scope names are allowed. When registering services, this list is used in addition to the general Scope List already created. This entry becomes the second in the list. If you only have one entry, disable this. If you have more than two entries, copy this one, replace the '1' in the value with '2', etc.
Setting Name:	Use Strict Registration Filtering
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	OFF
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]
Registry Value Name:	Strict Registration Filtering
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	STRING
Help/Comment:	To limit the registration filter scope to this specific list of scopes, check the Use Strict Registration Filtering check box.
Setting Name:	Directory Agent List (list)
Logical Value Type:	List
Range From:	N/A

Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]Directory Agent  
Registry Value Name: 0,1,etc  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: value is name of DA This is a list of SLP Directory Agent addresses. Multiple Directory Agent addresses are allowed. Each address is a fully qualified domain name (DNS), or a dotted decimal IP address. Directory Agents can also be configured via DHCP, or discovered dynamically.

Setting Name: Static  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]  
Registry Value Name: Static Das  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Check the Static check box if you don't want the list to be supplemented by scopes that are discovered dynamically from Directory Agents.

If you check the Static check box for the Directory Agent list, SLP requests will be sent to the Directory Agents whose addresses or DNS names have been configured in the list. Otherwise, SLP will send requests to all Directory Agents advertised in the network.

## Advanced Settings Tab

Setting Name: Auto Reconnect  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

Registry Value Name: Reconnect\_Level  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Enables/disables client auto reconnect.

Setting Name: Bad Address Cache Timeout  
Logical Value Type: Number  
Range From: 0  
Range To: 172800  
Default Value: 300  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetWareWorkstation\Parameters]

Registry Value Name: BadAddressCacheTimeout  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

Help/Comment: This parameter determines the number of seconds a Bad Address will remain in the Bad Address Cache. If the Client is unable to establish a connection to an IP or IPX address, it stores that address in the Bad Address Cache for the number of seconds specified in this parameter. Setting this parameter to 0 disables the Bad Address Cache.

The bad address cache is a list of unreachable addresses held in memory. If the Client needs to talk to an address, it sends a request to the protocol stack (IP or IPX) and the protocol stack tries to find and establish a connection with that address. If the protocol stack cannot establish a connection, then that address gets marked as "bad" for five (5) minutes. There is no way to find out what addresses are currently populated in the workstation's bad address cache.

If the address is an IP address, the Novell client sends a request to the TCP/IP stack on the Windows workstation. The TCP/IP stack makes three requests (SYN requests) to connect to that IP address. If the TCP/IP stack does not get a response back to those three requests, the TCP/IP stack returns a failure to the Novell client. The Novell client then places that "bad" IP address into the bad address cache (in memory) for five minutes.

If the address is an IPX address, the Novell client sends a request to NWLINK.SYS on the Windows workstation. NWLINK.SYS is Microsoft's IPX protocol stack. NWLINK.SYS will RIP for that IPX address. If NWLINK.SYS does not get a RIP response back, then the IPX stack returns a failure to the client. The Novell client then adds the IPX address to the bad address cache (in memory) for five minutes.

The bad address cache was implemented to help improve performance to dead or bad addresses. It is enabled by default.

However, in a network that is having communications problems (dropped packets, overloaded NetWare servers, etc.), the bad address cache can cause connectivity issues. Please see TID 10076045 titled "Slow login times when mapping a drive to a server that is down".

It is possible to enter addresses to which you never want to be connected. See "Bad Address Cache" in the *Comprehensive Listing of Novell Client Settings* section of this document.

Bad addresses are added to the Bad Address Cache, and the corresponding Bad Server name is added to the Bad Server Name Cache.

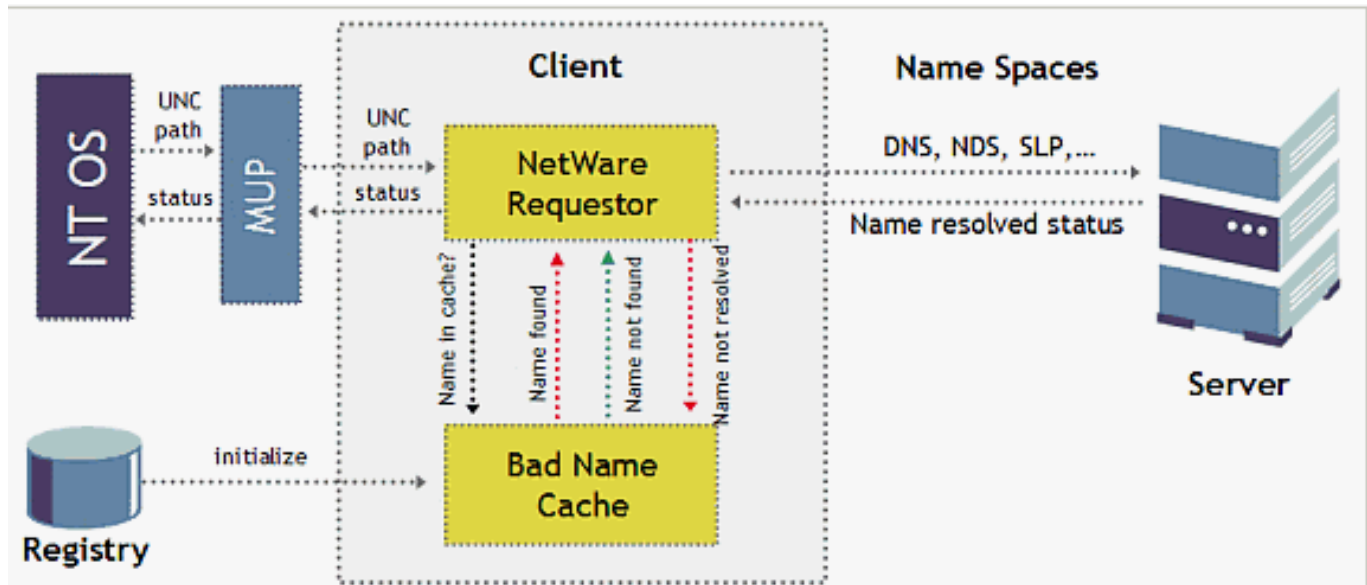
Setting Name:	Bad Server Name Cache Enabled
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	ON
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]
Registry Value Name:	Bad Name Cache Enabled
Default Registry Data:	1
Registry Value Data Type:	DWORD
Help/Comment:	Enables/disables Bad Server Name Cache. Bad Server Name Cache is used to keep track of server names the client has tried to resolve but have failed. Once a server name is placed in that cache list, the client will not hit the wire to contact it.

The bad name cache is an enhancement to the Novell client to help increase performance. A server name gets added to the bad name cache when none of the Name Service Providers can locate that resource. For example, let's say a workstation has IP and IPX protocols bound to the Novell client. A request is made to find the file server FS1. Assuming all the protocol components for IP and IPX are selected and used, the client will try to find server FS1 via the local host file, NDS, DNS, SLP, Bindery, and SAP. If the client can not find server FS1 via any of these methods, then the file server name FS1 gets added to the bad name cache for five (5) minutes. Any attempts to try to resolve FS1 within those five minutes will automatically fail - you will never see any requests on the wire (LAN interface) for FS1, even though the application may attempt to connect to FS1. This dynamic method of populating the bad name cache is only in memory; only the programs that access it (NWFS.SYS) have access to the contents of the dynamic bad name cache. There is not a way to go in a view the contents of the dynamic bad name cache on a workstation. However, there is a way that the Bad Name Cache can be enabled for certain names. See the entry for "BadServer" in the *Comprehensive*

*Listing of Novell Client Settings* section of this document.

If this setting is disabled, entries in the Bad Server Name, whether static (manually set in the BadServer key and entered into the cache at load time) or dynamic (learned by name resolution failures), will be ignored.

The following diagram illustrates the general operation of the Bad Server Name Cache.



See TID 10093266,

Setting Name:	Bad Server Name Cache Timeout
Logical Value Type:	Number
Range From:	0
Range To:	4294967295
Default Value:	300
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]
Registry Value Name:	Bad Name Cache Timeout
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD

**Help/Comment:** This parameter is the number of seconds before the value (unreachable server) times out in the cache. Setting the parameter to 4294967295 means that the value will never timeout. The default value is 300 seconds or 5 minutes. For example, if server FS01 is not found on the network, the client will not attempt to find that server on the wire for 5 minutes when using the default setting. The disadvantage of this setting is that if a server is determined as unreachable (temporary network glitch, server temporarily down) but then available a minute later, the client won't attempt to contact the server for 5 minutes. The advantage of the setting is that if the server is truly unreachable, then there is no need for the client to request the server and wait for the timeout of each resolution protocol. The resolution protocol time out is discussed in the "Name resolution timeout" section.

**Setting Name:** Burst Mode

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

**Registry Value Name:** Burst Mode

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** The Burst Mode parameter controls the use of the Packet Burst protocol for file input/output. Generally, Packet Burst reduces overall network traffic and improves performance. If you have a network board that has low performance and your network performance is slow, you might try enabling Packet Burst.

**Setting Name:** Cluster Connection Validation Interval

**Logical Value Type:** Number

**Range From:** 0

**Range To:** 300

**Default Value:** 20

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

**Registry Value Name:** ClusteringKeepAliveTime

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** The number of seconds between TCP KeepAlive packets. KeepAlive Packets are sent to the Cluster Server to validate the cluster connection. A value of zero will disable KeepAlive packets. The default value is 20 seconds. To disable the keep alive packets, set the Cluster Connection Validation Interval to 0.

If the Cluster Keep Alive packets are not sent to the server, the server sends a keep alive packet to the workstation, causing the workstation to resets the connection since it thinks that the cluster has failed over and that no longer has a valid connection to the cluster resource.

This setting is beneficial since when a failover occurs, the Serer hosting the cluster volume changes and the Client must reconnect to the cluster resource on the new server. Without this setting, this reconnection takes place when the user attempts to connect to the resource (mapped drive). This can result in a delay while the reconnection process takes place. Also, the user may be presented a potentially confusing error message. With this setting, the reconnection occurs in the background, so the user does not see an error message or experience a performance problem in the form of a delay when accessing a failed-over resource.

**Setting Name:** DOS Long Name Support

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

**Registry Value Name:** DosAppLongNameSupport

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** DOS Name is the operating system name used by the %OS parameter.

**Setting Name:** DOS Name

**Logical Value Type:** STRING

**Range From:** N/A

**Range To:** N/A

**Default Value:** WINNT

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

**Registry Value Name:** DOS\_Name

Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	STRING
Help/Comment:	DOS Name is the operating system name used by the %OS parameter.
Setting Name:	File Caching
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	ON
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]
Registry Value Name:	File Caching
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	This controls whether the client will cache files locally or not.

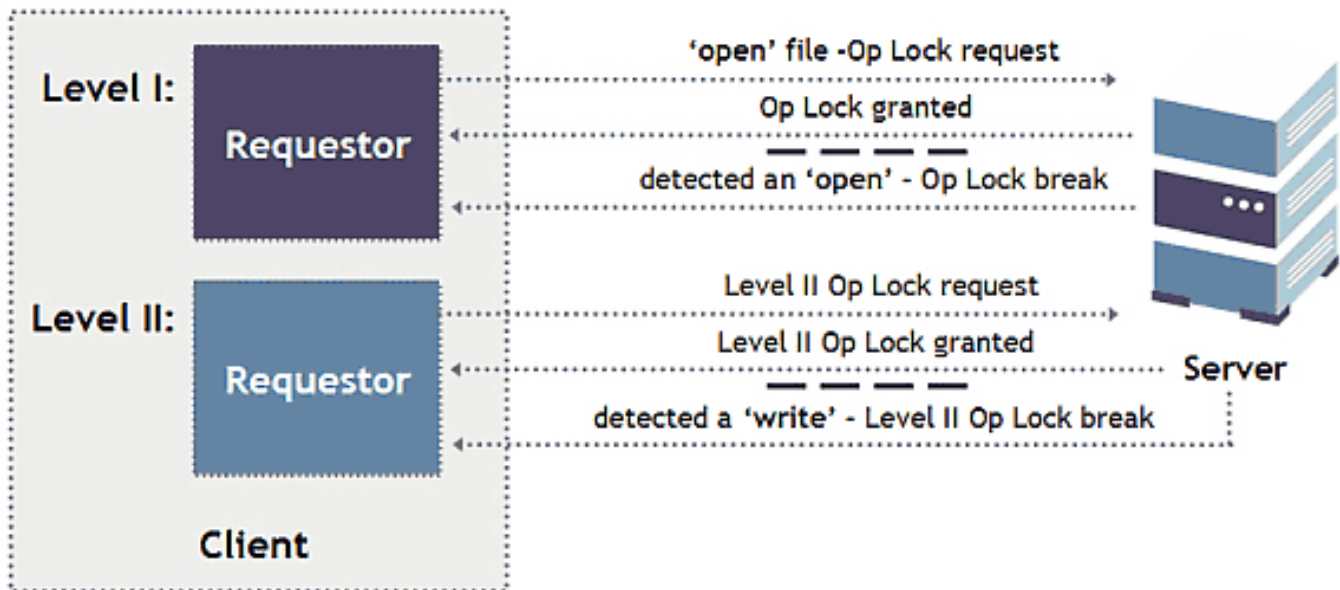
File Caching, also known as opportunistic locking, is a file access method which allows caching of a file on a workstation. This method greatly improves performance by limiting the number of reads/writes that would normally occur across the network. This is accomplished by using the Cache Manager provide through Microsoft. The Novell client (NWFS.sys) is oplock aware, if oplock (file caching) is enable on the workstation then nwfs.sys will invoke the cache manager. Cache Manager limits the number of packets that actually traverse the network. For instance, an application may request reads/writes at a data rate of 1 to 8 bytes per packet. This is not optimal. Cache manager caches the smaller writes and packages a larger data area within the packet. File read/writes are now optimized so what would normally take hundreds to thousands of packets can now occur in "tens" of packets. Poorly written applications, those that transmit small amounts of data, can truly benefit from the optimization provided by opportunistic locking. When considered, sending 8 byte packets opening a 1024kb file will generate a host of packets (request - replies -ack's). Application are redirector aware but are not aware of oplocks or the Cache Manager. Knowing this helps us understand why disabling "client file caching" on the server sometimes results in extreme performance degradation.

What is the difference between Level I and Level II oplocking?

Level I opportunistic locking provides exclusive caching to the first client accessing the file. The client is allowed read/writes in an optimized environment. Any subsequent file accesses by other clients will cause the oplock to be released.

The following diagram illustrates the operation of File Caching (Opportunistic Locking).





### Level I process -

1. The client sends a request to the server (Open file with callback - oplock).
2. Server grants oplock request from client.
3. Another client sends a request to the server to open the same file that the first client already has opened with an exclusive lock.
4. The server notifies the first client to release the oplock.
5. The first client releases the oplock, now both clients have "regular" non-oplock file access.

Level II opportunistic locking allows the same functionality as Level I but adds enhancements to further optimize oplock capabilities. Level II allows multiple users to request a file open and read that file all the while each client has the file cached locally. As you remember Level I only allowed 1 client to access the file, even if the file was only being read. Level II continues to allow clients the ability to cache locally provided no attempts to 'write' to the file occurs. When the server receives a write request from any client that has a Level II oplock then all locks are broken (released). The server uses a directed broadcast to inform the clients to release file locks upon a detected write. The directed broadcast is necessary because once a write occurs the server can no longer guarantee file integrity, the locks MUST be broken.

### Level II process (Level I occurs first) -

6. Level II oplock request to server.
7. Server grants Level II request from client.
8. Server detects a write on the file and breaks Level II oplocks (clients which had the file cached)

Setting Name:	File Commit
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

Registry Value Name: File Commit

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Controls whether buffers flushed by an application are committed to disk on the server. Setting this value to On will ensure data integrity at the expense of performance by ensuring file buffers are committed to disk on the server when an application flushes its file buffers.

Setting Name: Give Up on Requests to SAs

Logical Value Type: Number

Range From: 1

Range To: 60000

Default Value: 15

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: TIME-8-QUIT-SA-Q

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: This parameter specifies the maximum amount of time SLP will take to send requests to Service Agents. A Service Agent is a process that works on the behalf of one or more services to advertise those services.

SLP Timers can be viewed by executing SLPINFO /T.

See TID 10014466 for extensive SLP configuration instruction for the Novell Client.

Setting Name: Hibernate Reconnect Delay

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

Registry Value Name: Advanced Hibernation Support

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type:     DWORD  
Help/Comment:                 Allows time for the client to reauthenticate to NetWare servers when the workstation is exiting Hibernate or Stand by modes. Use the Hibernate Reconnect Delay Time and Hibernate Reconnect Retries parameters to configure the amount of time that will be allowed.

Setting Name:                 Hibernate Reconnect Delay Time  
Logical Value Type:         Number  
Range From:                 1  
Range To:                    30  
Default Value:               4  
Registry Key:                [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
                              \NetWareWorkstation\Parameters]  
Registry Value Name:         Reconnect Delay Time  
Default Registry Data:       None (value not present in registry by default)  
Registry Value Data Type:    DWORD  
Help/Comment:                The number of seconds the client will wait before each attempt to reconnect to NetWare servers when the workstation is exiting Hibernate or Stand by modes. This parameter is only effective when the Hibernate Reconnect Delay parameter is on. This parameter is used in conjunction with the Hibernate Reconnect Retries parameter.

Setting Name:                 Hibernate Reconnect Retries  
Logical Value Type:         Number  
Range From:                 1  
Range To:                    10  
Default Value:               6  
Registry Key:                [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
                              \NetWareWorkstation\Parameters]  
Registry Value Name:         Reconnect Delay Count  
Default Registry Data:       None (value not present in registry by default)  
Registry Value Data Type:    DWORD  
Help/Comment:                The number of times the client will attempt to reconnect to NetWare servers when the workstation is exiting Hibernate or Stand by modes. This parameter is only effective when the Hibernate Reconnect Delay parameter is on. This parameter is used in conjunction with the Hibernate Reconnect Delay Time parameter.

Setting Name:                 IP Address Costing  
Logical Value Type:         Number

Range From:	0
Range To:	2
Default Value:	2
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]
Registry Value Name:	IP Costing
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	This parameter controls the method used to cost address referrals from SLP, DNS, and NDS. The values are: 0 = disable IP address costing, 1 = calculate the address cost via sorting by subnet mask, 2 = calculate the address cost via an ICMP ECHO packet.

The TCP/IP protocol implemented in most environments uses RIP 1.0 for the client and router support. With the RIP 1.0 support, there is no way for a network host to determine the "distance" between itself and the IP address. Unlike IPX, TCP/IP does not have built-in fields for hops and ticks for network packets that track information that could be readily used for costing. Once a TCP connection has been made to a target device, the TCP/IP protocol does track a great deal of round-trip-time information, but when a list of potential devices is presented for the first time (when the client has not made a connection yet), there is no built-in support in RIP 1.0 to determine the physical or logical "distance".

Novell Engineering has been evaluating this issue for some time in an attempt to develop a method to do a best-cost algorithm to allow administrators to connect to the "closest" NDS replica server. There were two different approaches considered in the final deliberations:

1. Use the PING functionality to determine both IP router hops (TTL decrements) and RTT (round-trip time). This would require that the Client PING each server in the referral list.
2. Use the subnet information to calculate a closest subnet match to cost address distances. While this is not based on verified cost information such as hops, ticks or RTT, it does allow administrators to control what servers a client will connect to based on how they have subnetted and assigned IP addresses. It is arbitrary, but 100 percent predictable.
3. Do not allow the client to cost any referral addresses but trust the referral service to provide the referral list in a sorted (costed) list. Being that the closest address is listed first in the referral list. The client would just take the first address in the referral list a prefer it's connection over any of the other addresses in the list. If the first address in the referral list is unavailable or unable to service the request then the client would try the second address in the referral list. This process would continue until either the desired information/connection is made or the referral list has been exhausted in which case an error routine would process the next logical step.

Novell clients version 4.81 and 3.31 can be updated to support a newer IP costing mechanism that implements an ICMP ping to locate closest servers. The patch file ipcost.exe can add this newer functionality. Later releases of the Novell clients include the newer ICMP mechanism. Please refer to solution 2959403 for IP Costing Fix and TID 10053626 for an explanation of the IP costing algorithm.

The 4.83 and newer clients include an advanced client setting called "IP Address Costing". This setting allows the configuration of the registry key documented in the initial IP costing solution for the 4.81 clients. (see previous paragraph)

The IP Address Costing setting can contain 3 different possible values.

**0** - This value indicates that the client should not do any costing but to take the first address in the referral list. This is item 3 in the above cause statement.

**1** - This value indicates that the client should perform the subnet match algorithm as used in the Novell client versions 3.21 and 4.71-4.8. The original algorithm used in client versions 2.5-3.21 for Windows 95/98 and 4.3-4.71 are no longer used. This is item 2 in the above cause statement.

**2** - This value indicates that the client should perform an ICMP ping for all addresses contained in the referral list to determine actual cost of each device. This is the default mechanism and will be used regardless of the presence of the registry key. This is item 1 in the above cause statement.

### **Address Compare algorithm**

(Advanced client setting - IP Address Costing = 1)

The client applies three different filter checks for IP addresses received in a referral list:

1. Is the target address on the same Net as the source address? This is determined using the 4 different IP Classes (A, B, C, D, and E), a table is listed below defining the different IP Class address ranges:

Class A = 0.0.0.0 to 126.0.0.0

Class B = 128.0.0.0 to 191.0.0.0

Class C = 192.0.0.0 to 223.0.0.0

Class D = 224.0.0.0 to 239.0.0.0

Class E = 240.0.0.0 to 254.0.0.0

All target addresses that are not in the same Net are set at a cost of 10 (the maximum/furthest).

2. Is the target address on the same subnet as the source address? This is determined by using the source's subnet mask to compare the target and source subnet. If it matches EXACTLY, then the address is set at a cost of 1 (lowest/closest cost this client version will use). If it does not match exactly, then it will use the next filter check. Note that this value is different from the previous version of the client to support the next logic check.
3. The Client calculates the subnet for the workstation address and every server/target address in the referral list (those that are on the same Net but different subnet). The client then compares the workstation subnet against each server subnet in binary to determine how many CONSECUTIVE matching bits there are. This is not that same as doing an AND logical operation between the two

subnets since it is checking for CONSECUTIVE matching bits, not total matching bits. It will then take the total number of subnet Id bits and subtract the number of consecutive matching bits.

## **IP Cost = Total Subnet Id bits - Matching Subnet Id bits**

The lower the IP Cost number, the "closer" the address is and the higher the priority it has for being selected. The IP Cost has a range of 1 to 10 where 1 is on the same subnet as the workstation and all IP Costs greater than 10 are set equal to 10.

The following is an example of how the costing logic works:

Workstation address: 137.65.84.5 = 10001001.01000001.01010100.00000101 (binary)

Workstation Subnet Mask: 255.255.252.0 (decimal) = 11111111.11111111.11111100.00000000 (binary)

### Server Referral IP Address List:

Ref1 = 137.65.67.1 = 10001001.01000001.01000011.00000001

Ref2 = 151.155.158.1 = 10010111.10011011.10011110.00000001

Ref3 = 137.65.118.1 = 10001001.01000001.01110110.00000001

Ref4 = 137.65.183.1 = 10001001.01000001.10110111.00000001

Ref5 = 137.65.103.1 = 10001001.01000001.01100111.00000001

### Ref1 Costing:

Logic Check 1: 137.65 is same net as workstation Logic Check 2: Source subnet is 010101, Target subnet is 010000. Not equal

Logic Check 3: Matching bits = 3, Cost = 6 Total - 3 Matching = 3

Result: Cost = 3

### Ref2 Costing:

Logic Check 1: 151.155 is NOT same net as workstation, set Cost = 10

Logic Check 2: Not checked since Net not same

Logic Check 3: Not checked since Net not same

Result: Cost = 10

### Ref3 Costing:

Logic Check 1: 137.65 is same net as workstation

Logic Check 2: Source subnet is 010101, Target subnet is 011101. Not equal

Logic Check 3: Matching bits = 2, Cost = 6 Total - 2 Matching = 4

Result: Cost = 4

### Ref4 Costing:

Logic Check 1: 137.65 is same net as workstation

Logic Check 2: Source subnet is 010101, Target subnet is 101101. Not equal

Logic Check 3: Matching bits = 0, Cost = 6 Total - 0 Matching = 6

Result: Cost = 6

## Ref5 Costing:

Logic Check 1: 137.65 is same net as workstation

Logic Check 2: Source subnet is 010101, Target subnet is 011001. Not equal

Logic Check 3: Matching bits = 2, Cost = 6 Total - 2 Matching = 4

Result: Cost = 4

## Costing Results:

Ref1 = 137.65.67.1 = Cost 3

Ref2 = 151.155.158.1 = Cost 10

Ref3 = 137.65.118.1 = Cost 4

Ref4 = 137.65.183.1 = Cost 6

Ref5 = 137.65.103.1 = Cost 4

Given this scenario, the 137.65.67.1 Target Address will be selected because it has the lowest cost using the subnet consecutive matching bit algorithm.

## ICMP Ping algorithm

(Advanced client setting - IP Address Costing = 2) (Default setting)

With this setting the Novell client will perform an ICMP ping to any referral list it receives for SLP, DNS, or NDS services. There are a number of calculations used by the client to generate an actual cost for each address in the referral list. The below is a step by step guide to how the Novell client currently generates this information. (As of 4.83 SP1 and 4.9)

There are two processes that occur when the client needs to access a resource on the network. The first process is a dynamic calculation of cost that gets performed every time the client needs to access a network resource via an address. This calculation is necessary to perform the logic of already established connections, and the specified preferred protocol.

## Dynamic calculation

Initially sets all addresses at a base of 0x8000.

If the address type matches the preferred protocol setting of the client then this base value is divided in half. So addresses that match the preferred protocol will have an initial base address of 0x4000.

If we already have a connection to the address then subtract the value of 5 from the base.

Once we have determined the base values for each address in the referral list we then compare with the costing table. The costing table is built using an ICMP ping packet. (These packets can be easily identified in a packet trace by looking at the data within the ICMP packet. The Novell client currently puts the following information inside the ICMP packet.)

(NWFS: Version=xxxxxxx: Novell Net Service Route Request, v4.x, (xxxxxxx))

The version number supplied is a date stamp of the nwfs.sys module on the workstation. This is calculated as the number of seconds since midnight 1970. The last part of the string indicates either 4.83 or 4.9 and the date reflected would be the respective date of the nwfs.sys module as indicated by the Novell version information. This same information can be found on the workstation by viewing the properties of the nwfs.sys module.

### Static calculation (IP Costing Table)

When the ICMP reply is received by the client the following calculation occurs to generate the raw costs that are stored in the table. All addresses start with a raw cost of 0.

The time in milliseconds is measured between the request and reply packets. For example if it took a round trip time of 4 ms for the reply packet to get back to the workstation then the client would add a cost of 4.

The TTL value contained in the IP header of the packet is evaluated. The client looks at the value and performs the following logic.

If the value is less than 128 then it assumes that the initial TTL value was 128. It then subtracts the value from 128 and then adds this value to the raw cost of the address. For example if the TTL value was 127 then the client would add 1 to the raw cost of the address.

If the value is greater than 128 then the client assumes that the initial TTL value was 256. It then subtracts the value from 256 and then adds this value to the raw cost of the address.

Example:

Lets say that I have both IPX and IP installed on my workstation and I perform an SLP request for my tree called "Mytree". My preferred network protocol setting in the client is set to IP.

1. The first thing that will happen is the Novell client will generate an SLP request for ndap.novell = mytree
2. Let say that there are two servers that both contain a replica for this tree. The referral list that comes back from each server is...

```
10.10.10.1
192.1.1.1
123456:adbeef
```

3. The client first performs it's dynamic calculations of the addresses to determine the base cost.

```
10.10.10.1 - This matches my preferred network protocol so I set the base to 0x4000
192.1.1.1 - This also matches my preferred network protocol so I set the base to 0x4000
123456:adbeef - This is an IPX address and does not match my preferred network protocol so I
set the base to 0x8000
```

The workstation is not currently connected to any of the addresses so it does not adjust the costs for current connections. If it already had a connection to lets say "10.10.10.1", then the base cost



would be decremented by 5 to reflect 0x3FFB. If it had been connected to both servers then it would have to decrement both by 5.

- The client now will start building the static IP costing table. We generate the ICMP ping packet to each IP address in the referral list and measure the time for each address to reply in milliseconds.

10.10.10.1 - 5ms

192.1.1.1 - 2ms

At the same time the client also processes the TTL values that were inside the IP header of the reply packet. (The TTL value is set to a specific initial value by the sending host, Each router that the packet is forwarded across will decrement this value. For example NetWare servers will set the initial TTL value to 128 so when the workstation receives a packet with the TTL of 122 then we can assume that there are 6 routers between the workstation and the server)

10.10.10.1 - TTL value of 126

192.1.1.1 - TTL value of 254

The client takes the TTL value and the millisecond timer and add them together. This is then saved to the IP costing table as a raw cost.

Address	Cost
10.10.10.1	7
192.1.1.1	4

The cost of 7 for address 10.10.10.1 is based on 5ms + (128 - 126)

The cost of 4 for address 192.1.1.1 is based on 2ms + (256 - 254)

- So now the client just puts all of this information together to determine the closest address.

Address	Base	Cost	Total
10.10.10.1	0x4000	7	0x4007
192.1.1.1	0x4000	4	0x4004
123456:adbbee	0x8000	4	0x8004

The client will now connect to the lowest total valued address. In our example we would connect to the 192.1.1.1 address.

Note: We did not discuss the process utilized under IPX for our last address of 123456:adbbee. The cost generated for this address is created by normal IPX communications. The workstation would generate a RIP request to the desired IPX address. The server that can route the request for the workstation would respond with a RIP response packet. Contained in this packet is a Hop/Tic count. The Novell client will use the Tic count to cost IPX routes. It does not use the Hop count.

Also note that the client will randomize equally costed routes. So if there is no connection already made to the server or if the base + cost equals the same for multiple addresses, then the client will jump between the different addresses. This process allows for load balancing of network traffic.

## No Cost

(Advanced client setting - IP Address Costing = 0)

This setting tells the Novell client to not perform any costing of referrals. It does not keep a costing table

and will select the first address in any referral list. (This setting is to allow for future NDS enhancements)

Setting Name: Large Internet Packet Start Size  
 Logical Value Type: Number  
 Range From: 512  
 Range To: 65535  
 Default Value: 65535  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
 \NetWareWorkstation\Parameters]  
 Registry Value Name: LIP Start Size  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: Large Internet Packet Start Size determines the starting value for negotiating the Large Internet Packet size. Setting this value can shorten the initial negotiation time for packet size over slow links.

Setting Name: Large Internet Packets  
 Logical Value Type: OFF/ON  
 Range From: N/A  
 Range To: N/A  
 Default Value: ON  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
 \NetWareWorkstation\Parameters]  
 Registry Value Name: Large Internet Packets  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: Use this setting to limit SAP so that it locates servers only on connections where the bindery is present. Disable this parameter if you want SAP to find servers if the bindery query fails.

Setting Name: Limit SAP Broadcast Queries  
 Logical Value Type: OFF/ON  
 Range From: N/A  
 Range To: N/A  
 Default Value: ON  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
 \Policies\Network\IPX\Address Resolution Providers\LimitSAP]  
 Registry Value Name: Level

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Use this setting to limit SAP so that it locates servers only on connections where the bindery is present. Enable this policy if you want SAP to find servers if the bindery query fails.

Setting Name: Link Support Layer Max Buffer Size  
Logical Value Type: Number  
Range From: 638  
Range To: 24582  
Default Value: 4736  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services\LSL\Parameters]  
Registry Value Name: Max Buffer Size  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies the maximum supported packet size in bytes. Use this setting to optimize performance for media (primarily token ring) that can use packets that are larger than the default size. If your network uses bus-mastering, increasing the settings increases system memory usage. Otherwise, system memory usage is usually unaffected by this setting.

Setting Name: Long Machine Type  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: IBM\_PC  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services\NetWareWorkstation\Parameters]  
Registry Value Name: Long Machine Type  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Tells the Novell Client for Windows NT what type of machine is being used each time the %MACHINE variable is accessed. Use this setting to set the machine's search path to the correct version of DOS.

Setting Name: Max Read Burst Size  
Logical Value Type: Number

Range From: 1  
Range To: 65536  
Default Value: 36000  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetWareWorkstation\Parameters]  
Registry Value Name: Max Read Burst Size  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies the maximum read burst size that the client can request from the server. Max Read Burst Size values smaller than the maximum packet size supported by the medium effectively disable Packet Burst for file reads. The client will try to request a read burst of the maximum size only if network conditions allow it.

Setting Name: Max Write Burst Size  
Logical Value Type: Number  
Range From: 1  
Range To: 65536  
Default Value: 15000  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetWareWorkstation\Parameters]  
Registry Value Name: Max Write Burst Size  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies the maximum write burst size that the client can request from the server. Max Write Burst Size values smaller than the maximum packet size supported by the medium effectively disable Packet Burst for file writes. The client will try to request a write burst of the maximum size only if network conditions allow it. Increasing this value beyond its default might be detrimental to server performance.

Setting Name: Minimum Time to Net  
Logical Value Type: Number  
Range From: 0  
Range To: 65535  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetWareWorkstation\Parameters]  
Registry Value Name: Mimimum Time To Net  
Default Registry Data: None (value not present in registry by default)

Registry Value Data Type:      DWORD

Help/Comment:                Used for bridged WAN/satellite with time-to-net values set too low for workstations to make a connection under either of the following conditions: the server on the other side of the link is not running Packet Burst or the transfer rate for the link is 2400 baud or less. For 2400 baud, set this parameter to 10000 milliseconds.

Setting Name:                 Name Resolution Timeout

Logical Value Type:         Number

Range From:                 1

Range To:                    180

Default Value:              10

Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network]

Registry Value Name:        Timeout in Seconds

Default Registry Data:       None (value not present in registry by default)

Registry Value Data Type:   DWORD

Help/Comment:               The time in seconds the client will wait for the configured name space providers to resolve the specified name to an address. Assigning too low of a value may cause the client to be unable to resolve valid names. Setting this value too high may cause the client to attempt to resolve an invalid name longer than desirable.

Setting Name:                 Quit Idle Connects

Logical Value Type:         Number

Range From:                 1

Range To:                    60000

Default Value:              5

Registry Key:                [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name:        TIME-12-QUIT-IDLE-CONNECTS

Default Registry Data:       None (value not present in registry by default)

Registry Value Data Type:   DWORD

Help/Comment:               Time (in minutes) for DAs and SAs to close idle TCP connections.

                              SLP Timers can be viewed by executing SLPINFO /T.

                              See TID 10014466 for extensive SLP configuration instruction for the Novell Client.

Setting Name: Receive Broadcast Messages  
Logical Value Type: Choice  
Range From: ALL/Server Only/None  
Range To: ALL  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Broadcast]  
Registry Value Name: Mode  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD (0=All,1=Server,2=None)  
Help/Comment: Tells the client which broadcast messages, if any, to receive. You can choose one of the following settings: All (receive all broadcast messages), Server Only (receives broadcast messages sent by the server only), and None (do not receive any broadcast messages).

Setting Name: Replica Timeout  
Logical Value Type: Number  
Range From: 0  
Range To: 1000  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]  
Registry Value Name: Replica Timeout  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: The duration of time in which the client will attempt to login to the previously logged-out NDS replica.  
  
If concurrent connections are limited, the user may get an error stating the user has a limited number of concurrent connections.  
  
Error message:  
"You are trying to login to too many stations simultaneously. The Supervisor has limited the number of user connections you may have."  
  
This can happen after shutdown and logon as new user (usually when using the "Close all programs and login as a new user" option). This happens because the client checks the net:node:socket to a NetWare partition replica on a different server other than the server the client was previously connected to and the net:node:socket still exists because the replicas have not completed the sync.  
  
This problem usually goes away within seconds unless there is a NDS sync problem.

Setting the Replica Timeout setting to a non-zero value (try 5 or 10) should cause the Client to contact the same replica when it re-authenticates.

The 'Replica Timeout' setting implements the following logic: During login, the Client will create a registry key that has the username and monitored connection server name. Upon a normal/successful logout/shutdown/close all programs and login as a different user, the NT Client will delete this information. Upon the next login, a check will be to see if this information exists in the registry. If so, then client will check to see if it is the same username. If so, the client will attempt to connect to the same server that was the monitored connection previously.

See TID 2943798.

Setting Name:	Server Cache Timeout
Logical Value Type:	Number
Range From:	0
Range To:	60
Default Value:	21
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]
Registry Value Name:	ServerCacheTimeout
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	Number of days before an entry is cleared out of the cache.

The actual server cache is stored in the registry for Windows NT/2000 in the following registry key:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NetWareWorkstation\  
ServerCache

Each Cache entry here includes the following elements:

**RemoteAddress** - contains the IP, TCP, and UDP addresses discovered for the ServerName.

**ServerName** - name of the service, usually the NetWare Server name (i.e. FS01).

**Timestamp** - time/date this information was last referenced, used in conjunction with the ServerCacheTimeout to determine when this entry should be automatically deleted.

The server cache behaves much like a local host file. The client doesn't need to go to the network to resolve a server name when that name is in the server cache in the registry. The server name cache is persistent only as long as the workstation address does not change

and the workstation has not been rebooted. The Client will flush the server name cache every time the workstation address changes.

Setting Name: Set Station Time  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Login Screen]  
Registry Value Name: Synchronize Time  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Synchronizes the client workstation date and time with that of the NetWare server that the client workstation initially attaches to. Enable this policy to disable the synchronization feature.

Setting Name: Short Machine Type  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: IBM  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]  
Registry Value Name: Short Machine Type  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies which overlay files to use with the specific machine type. This setting is similar to Long Machine Type, except that it is used specifically with overlay files. The value for this setting can be up to four characters long. Use this setting when the %MACHINE variable is accessed. Examples of files using this setting include the ibmrun.ovl file for the windowing utilities and the cmpqrun.ovl file for NetWare menus.

Setting Name: Signature Level  
Logical Value Type: Number  
Range From: 0  
Range To: 3



Default Value: 1

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

Registry Value Name: Signature Level

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Determines the level of enhanced security support. Enhanced security includes the use of a message digest algorithm and a per connection/ per request session state. The values are as follows: 0 = disabled, 1 = Enabled but not preferred, 2 = Preferred, 3 = Required. Setting the value of this parameter to 2 or 3 increases security but decreases performance.

Setting Name: SLP Active Discovery

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: Active Discovery

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: This parameter specifies that SLP is required to look up services from a Directory Agent and not use IP multicasting directly to SLP Service Agents for services. SLP's normal operation is to first check Directory Agents. If no Directory Agent is found, SLP multicasts to Service Agents.

A common best practice is to have the user workstations attempt to contact their discovered DAs first and then fall back to multicast for local servers if the DAs are not responding/down. This is accomplished by leaving "SLP Active Discovery" set to "On". If the Client has "discovered" at least one active DA, then all requests will be made to the DA first. It will only then multicast for the SLP Services if all of the active discovered DAs fail to respond by the "Wait Before Giving Up On DA" time. This will require that the infrastructure admins leave multicast routing enabled between the client workstations and the local servers for 224.0.1.22. It is recommended that multicast routing is DISABLED on WAN port interfaces to prevent the creation of multicast storms. The general idea is to have clients be able to multicast to find servers on their local LAN, but not have those requests cross any WAN links.

Setting Name: SLP Cache Replies  
Logical Value Type: Number  
Range From: 1  
Range To: 60  
Default Value: 1  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]  
Registry Value Name: TIME-0-CACHE-REPLIES  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: When SLP receives a service request from a User Agent, the SLP  
reply is saved for the amount of time specified by the SLP Cache  
Replies parameter. If SLP receives a duplicate of this request, the  
cached reply is sent so the same reply does not have to be generated  
again.

Setting Name: SLP Default Registration Lifetime  
Logical Value Type: Number  
Range From: 60  
Range To: 60000  
Default Value: 10800  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]  
Registry Value Name: TIME-1-REG-LIFETIME  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Time (in seconds) for the default registration lifetime of a service.  
  
SLP Timers can be viewed by executing SLPINFO /T.  
  
See TID 10014466 for extensive SLP configuration instruction for the  
Novell Client.

Setting Name: SLP Maximum Transmission Unit  
Logical Value Type: Number  
Range From: 576  
Range To: 4096  
Default Value: 1400  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]

Registry Value Name: MTU  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This parameter specifies the maximum transmission unit (UDP packet size) for the link layer used. Erroneously setting this parameter either too large or too small will adversely affect performance of SLP. This setting is used to restrict the size of the SLP packets so that it does not exceed the capability of the infrastructure and prevent resource intensive packet fragmenting and reassembly.

The range is 576 to 4,096 bytes. The default is 1,400. It is recommended that this setting most closely match the protocol packet size the network is using (1514 for Ethernet and 4096 for Token Ring).

Setting Name: SLP Multicast Radius  
Logical Value Type: Number  
Range From: 1  
Range To: 32  
Default Value: 32  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: Multicast Radius  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

Help/Comment: This parameter is a number specifying the maximum number of subnets (number of routers plus 1) that SLP's multicasting should traverse. In the SLP world, multicasting is the client's method of locating IP services on the network. The value range is from 1 to 32. A value of 1 confines multicasting to the local segment (no routers).

In its simplest form, SLP uses multicasts from the clients (User Agents or UAs) to find services (Service Agents or SAs) on servers. In this simple configuration, the SA does not advertise its services by broadcasting or replicating information to other servers, routers, or clients. Instead, the server waits for a multicast request from a client. If a client sends a multicast request looking for a service that is running on the server, the server will send a unicast message back to the client with the information about the requested service.

Multicasts are not isolated to local segments. Routers will forward them to whatever subnets have a member of the multicast group. A value of 1 confines multicasting to the local segment (no routers). The range on the SLP Multicast Radius entry is from 1 to 32, with the default set to 32.

For best network performance, use Directory Agents (DA). Directory

Agents reduce the consumption of bandwidth from SLP multicast traffic by having each server's Service Agent register its services via unicasts with the DA. Additionally, the workstation clients that are requesting IP services can unicast their requests to the DA instead of multicasting their requests to all the servers on the network.

Setting Name: SLP Protocol Version

Logical Value Type: Choice

Range From: SLPv2only, SLPv1only, Automatic

Range To: Automatic

Default Value: Automatic

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: Slp Protocol Version

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Determines the SLP protocol version that will be used by the client. Selecting Automatic will result in the client using the SLP protocol version determined by the DA contacted and its scope. Selecting SLPv2 only or SLPv1 only will limit the client to that specific SLP protocol version for both unicast and multicast. In a network with no DAs, both SLPv1 and SLPv2 requests are multicasted.

Setting Name: SLP Resolve Nearest Server

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \nwslp\Parameters]

Registry Value Name: Return Nearest Server

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: This parameter enables costing and sorting of all attribute responses in order to return the nearest server.

Setting Name: SLP Resolve Nearest Server Wait Time

Logical Value Type: Number

Range From: 200

Range To: 5000  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\nwslp\Parameters]  
Registry Value Name: Return Nearest Server Timeout  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: The number of milliseconds to wait after the last SLP response for  
additional SLP responses before resolving the nearest server. If the  
SLP Resolve Nearest Server parameter is off, this parameter is not  
used.

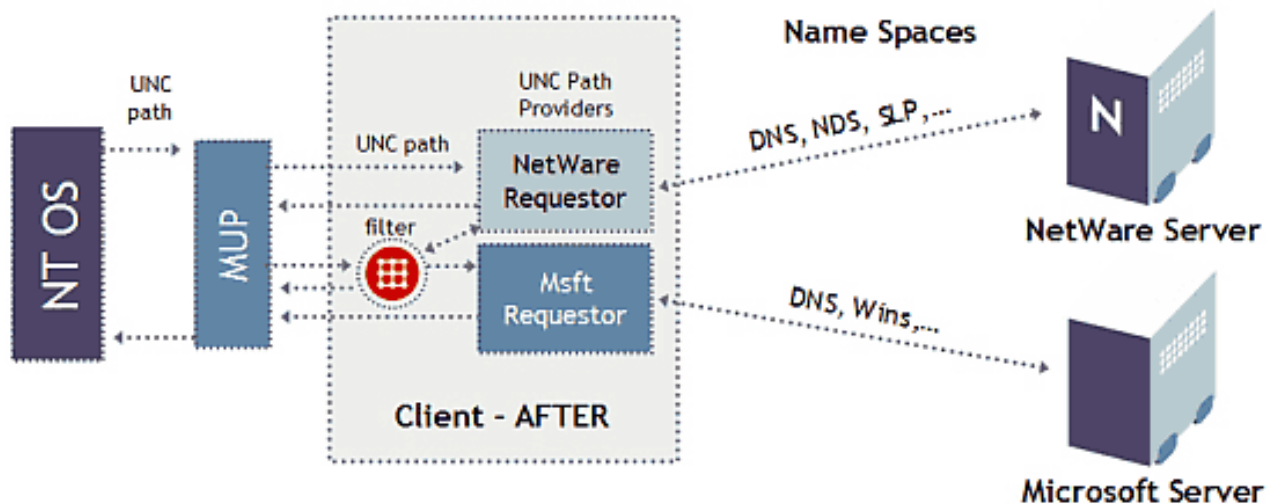
Setting Name: SLP Service Request Limit  
Logical Value Type: Number  
Range From: 0  
Range To: 65535  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\nwslp\Parameters]  
Registry Value Name: SLP Service Request Limit  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Limits the total number of attribute requests sent when using a wild  
card search. An attribute request is sent for each service and ICMPs  
are sent to cost each referral. If the SLP Resolve Nearest Server  
parameter is off, there is unnecessary traffic. If the SLP Resolve  
Nearest Server parameter is on, this parameter is not used. Setting  
this parameter to 0 allows for unlimited SLP Service Requests.

Setting Name: UNC Path Filter  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NWFILTER\Parameters]  
Registry Value Name: Enable  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

## Help/Comment:

Enables/disables the UNC Path Filter. Filters requests for UNC path resolution sent to the Client for Microsoft Networks (Microsoft Redirector). When enabled, UNC path queries sent to the Microsoft Redirector will first be filtered by the Novell Client to see if the server name is known by the Novell Client. If it is known, then a name resolve will not be attempted by the Microsoft Redirector. If the server name is not known, then the usual name resolution process will occur. This can dramatically increase the speed of network file operations and resource mappings by preventing Microsoft look-ups being sent to NetWare servers.

The following diagram illustrates the operation of the UNC Path Filter.



Setting Name:	Use DHCP for SLP
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	ON
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]
Registry Value Name:	DHCP
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	STRING

**Help/Comment:** This parameter specifies whether Dynamic Host Configuration Protocol (DHCP) be used for obtaining SLP scope and Directory Agent configuration.

SLP scopes allow network administrators to organize SLP services into groups. The Service Agent on each server determines into which groupings the services on that server will be registered. By default, all SLP services are registered in the "unscoped" grouping.

When clients send SLP requests to a Directory Agent, they can specify a scope for the DA to use in order to find the service they are looking for. If no scope is specified by the client, the DA will look in the "unscoped" table to find the service requested.

As a service, DHCP (Dynamic Host Configuration Protocol) automatically allocates reusable (dynamic) IP network addresses in an environment that has limited IP address resources. Windows 95/98 clients can use this service to initially establish connections and to set preferred tree and context.

The "Use DHCP for SLP" parameter specifies whether the Dynamic Host Configuration Protocol can be used for obtaining SLP scope and Directory Agent configuration information. The default is ON.

In order to use DHCP on the server, the SET SLP DA Discovery Options = <value>, where <value> = 0 to 8 (Default = 3)

0x01 = Use multicast DA advertisements  
 0x02 = Use DHCP discovery  
 0x04 = Use static file SYS:ETC\SLP.CFG  
 0x08 = Scopes Required

The default of 3 combines both 0x01 and 0x02 values. For more on the different SLP server commands, see the Appendix: SLP Console Commands and Settings heading in "Dynamically Discovering Services on an IP Network Using SLP" in the March 1999 issue of Novell AppNotes. (<http://developer.novell.com/research/appnotes/1999/march/02/index.htm>)

**Setting Name:** Use Multicast if no Unscoped DA Found

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

**Registry Value Name:** Use Multicast if no DA Found

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** If no DA is found that supports unscoped, use multicast for unscoped and unicast to active DAs for other scopes. This parameter is used only when the SLP Protocol Version is SLPv1.

**Setting Name:** Use UTF8 encoding and NCPs

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

**Registry Value Name:** UseUTF8NCPs

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** When this setting is enabled the client will communicate with UTF8 capable servers using UTF8 encoding and NCPs. UTF8 encoding allows client workstations of differing languages to more effectively communicate with the same server.

**Setting Name:** Wait Before Giving Up On DA

**Logical Value Type:** Number

**Range From:** 1

**Range To:** 60000

**Default Value:** 5

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

**Registry Value Name:** TIME-6-QUIT-DA-WAIT

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** This parameter specifies the amount of time, in seconds, that SLP will wait before giving up on a request to a Directory Agent. A Directory Agent collects and caches service advertisements from Service Agents.

The range is 1 to 60,000 seconds. The default is 5 seconds. At this point, the User Agent begins multicasting SLP for known services.

SLP Timers can be viewed by executing SLPINFO /T.

See TID 10014466 for extensive SLP configuration instruction for the Novell Client.



Setting Name: Wait Before Registering on Passive DA  
Logical Value Type: Number  
Range From: 1  
Range To: 60000  
Default Value: 2  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]  
Registry Value Name: TIME-10-WAIT-REG-DA-PASSIVE  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Specifies the range of time, in seconds, for the random delay interval  
before a Service Agent registers its service with the Directory Agent.

If an SA running on the workstation receives an unsolicited DA Advertisement (i.e. either the DA just started or the DA issued a heartbeat), the SA will need to register whatever services it offers. This parameter is used to specify a range that the SAs will attempt to register their services to prevent the SAs on a network from all attempting to register with the DA at the same time. As mentioned earlier, the Client workstation may have use SLP to advertise Services it provides. However this is currently unusual, but may change in the future as applications begin to take advantage of this new advertising method.

SLP Timers can be viewed by executing SLPINFO /T.

See TID 10014466 for extensive SLP configuration instruction for the Novell Client.

Setting Name: Workstation Manager Login Event  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\WM Notify]  
Registry Value Name: Enable  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

**Help/Comment:** Enables/Disables Novell Client login event notifications to be sent to Workstation Manager. These events allow the ZENworks Policy Scheduler to launch policies scheduled for these event types. If you have disabled the Initial Novell Login or users login to eDirectory from the red N menu, enable this setting so that login events are forwarded to Workstation Manager.

## Advanced Menu Settings Tab

**Setting Name:** Change Password  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** ON  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
**Registry Value Name:** Change Password  
**Default Registry Data:** None (value not present in registry by default)  
**Registry Value Data Type:** STRING  
**Help/Comment:** Enables/disables changing your password. The Change Password button is found in the Novell Password Administration dialog. See Enable Password Administration for further information on this dialog.

**Setting Name:** Display Bindery Services Page  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** ON  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Property Pages]  
**Registry Value Name:** Display Bindery Services Page  
**Default Registry Data:** YES  
**Registry Value Data Type:** STRING  
**Help/Comment:** Display/hide the Bindery Services page. The Bindery Services page is accessed by selecting Properties from the context menu of the NetWare servers icon in Network Neighborhood.

**Setting Name:** Display Container Page  
**Logical Value Type:** OFF/ON

Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display Container Page  
Default Registry Data: YES  
Registry Value Data Type: STRING  
Help/Comment: Display/hide the Bindery Container page. The Container page is  
accessed by selecting Properties from the context menu of the  
selected container icon in Network Neighborhood.

Setting Name: Display DFS Junction Information Page  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display DFS Object Page  
Default Registry Data: YES  
Registry Value Data Type: STRING  
Help/Comment: Display/hide DFS Junction Information Page. The DFS Junction  
Information tab is found by selecting Properties from the context menu  
of a DFS Junction on a NetWare server.

Setting Name: Display Directory Map Object Page  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display Directory Map Object Page  
Default Registry Data: YES  
Registry Value Data Type: STRING

Help/Comment: Display/hide the Directory Map Object page. The Directory Map Object page is accessed by selecting Properties from the context menu of the selected Directory Map Object icon in Network Neighborhood.

Setting Name: Display Directory Services Page

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Property Pages]

Registry Value Name: Display Directory Services Page

Default Registry Data: YES

Registry Value Data Type: STRING

Help/Comment: Display/hide the Directory Services page. The Directory Services page is accessed by selecting Properties from the context menu of the Novell Directory Services icon in Network Neighborhood.

Setting Name: Display NetWare Information Page

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Property Pages]

Registry Value Name: Display Netware Information Page

Default Registry Data: YES

Registry Value Data Type: STRING

Help/Comment: Display/hide the NetWare Information tab. The NetWare Information tab is found by selecting Properties from the context menu of a volume, directory or file on a NetWare server.

Setting Name: Display NetWare Rights Page

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]

Registry Value Name: Display Netware Rights Page

Default Registry Data: YES

Registry Value Data Type: STRING

Help/Comment: Display/show the NetWare Rights tab. The NetWare Rights tab is found by selecting Properties from the context menu of a volume, directory or file on a NetWare server.

Setting Name: Display Password Policies

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]

Registry Value Name: Display Password Policies

Default Registry Data: YES

Registry Value Data Type: STRING

Help/Comment: Enables/disables the display of the Password Policy during the Change Password function. The Password Policy determines whether a new password shall be acceptable - based on the minimum/maximum password length, the number of alpha or numeric characters, and so on.

Setting Name: Display Server Page

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]

Registry Value Name: Display Server Page

Default Registry Data: YES

Registry Value Data Type: STRING

Help/Comment: Display/show the Server Page. The Directory Services page is accessed by selecting Properties from the context menu of the selected server in Network Neighborhood.

Setting Name: Display Tree Page  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display Tree Page  
Default Registry Data: YES  
Registry Value Data Type: STRING  
Help/Comment: Display/hide the Tree Page. The Directory Services page is accessed  
by selecting Properties from the context menu of the selected tree in  
Network Neighborhood.

Setting Name: Display Volume Information Page  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display Volume Information Page  
Default Registry Data: YES  
Registry Value Data Type: STRING  
Help/Comment: Display/hide the Volume Information tab. The Volume Information tab  
is found by selecting Properties from the context menu of a volume.

Setting Name: Display Volume Statistics Page  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Property Pages]  
Registry Value Name: Display Volume Statistics Page  
Default Registry Data: YES  
Registry Value Data Type: STRING

**Help/Comment:** Display/hide the Volume Statistics tab. The Volume Statistics tab is found by selecting Properties from the context menu of a volume.

**Setting Name:** Enable Authenticate to Server

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

**Registry Value Name:** Enable Authenticate to Server

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** STRING

**Help/Comment:** Enables/disables authenticating to a server. The Authenticate menu item is displayed in the context menu of a server.

**Setting Name:** Enable Authenticate to Tree

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

**Registry Value Name:** Enable Authenticate to Tree

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** STRING

**Help/Comment:** Enables/disables authenticating to a tree. The Authenticate menu item is displayed in the context menu of a tree.

**Setting Name:** Enable Browse To Dialog

**Logical Value Type:** OFF/ON

**Range From:** N/A

**Range To:** N/A

**Default Value:** ON

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

**Registry Value Name:** Enable Browse to Dialog

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Browse To dialog. This menu item is displayed in the context menu of the Novell (N) system tray icon.

Setting Name: Enable Capture Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Capture Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Enable Change Context Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Change Context Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the change context dialog. This menu item is found in the context menu of the Selected container in Network Neighborhood.

Setting Name: Enable Disconnect Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON



Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Disconnect Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Enable End Capture Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable End Capture Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Enable Group Membership Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Group Membership Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Group Membership item in the User  
Administration menu. See the Show User Administration Menu setting  
for further information on this menu.

Setting Name: Enable Inherited Rights Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A

Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
Registry Value Name: Enable Inherited Rights Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the inherited rights dialog. This dialog can be reached from a menu item in the context menu of a Volume or Directory or under the NetWare Utilities menu in the red N.

Setting Name: Enable Login Administration  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
Registry Value Name: Enable Login Administration  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Login Account Information item in the User Administration menu. See the Show User Administration Menu setting for further information on this menu.

Setting Name: Enable Login Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
Registry Value Name: Enable Login Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the login dialog. This menu item is displayed in the context menu of the Novell (N) system tray icon and in the context menu of Network Neighborhood.

Setting Name: Enable Login to Server  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Login to Server  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables logging in to a server. The Login to Server menu  
item is displayed in the context menu of the selected server.

Setting Name: Enable Logout of Server  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Logout of Server  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables logging out of a server. The Logout menu item is  
displayed in the context menu of a server. Subsequently, the Detach  
button when a server is highlighted in NetWare Connections is also  
enabled/disabled according to this parameter.

Setting Name: Enable Logout of Tree  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Logout of Tree  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING

**Help/Comment:** Enables/disables logging out of a tree. The Logout menu item is displayed in the context menu of a tree. Subsequently the Detach button when a tree is highlighted in NetWare Connections is also enabled/disabled according to this parameter.

**Setting Name:** Enable Map Dialog  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** ON  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
**Registry Value Name:** Enable Map Dialog  
**Default Registry Data:** None (value not present in registry by default)  
**Registry Value Data Type:** STRING  
**Help/Comment:** Enables/disables the network drive mapping dialog.

**Setting Name:** Enable Modify Container Script  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** ON  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
**Registry Value Name:** Enable Modify Container Script  
**Default Registry Data:** None (value not present in registry by default)  
**Registry Value Data Type:** STRING  
**Help/Comment:** Enables/disables the modify container script menu item. This item is displayed in the context menu of the selected container.

**Setting Name:** Enable NDS Login to Tree  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** ON  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]  
**Registry Value Name:** Enable NDS Login to Tree

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables logging in to a tree. The Login to NDS Tree menu item is displayed in the context menu of the selected tree.

Setting Name: Enable NDS Mailing Information  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider \Menu Items]  
Registry Value Name: Enable NDS Mailing Information  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Mailing Information item in the User Administration menu. See the Show User Administration Menu setting for further information on this menu.

Setting Name: Enable NDS Personal Information  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider \Menu Items]  
Registry Value Name: Enable NDS Personal Information  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment:

Setting Name: Enable NDS Work Information  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

Registry Value Name: Enable NDS Work Information

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Enables/disables the Work Information item in the User Administration menu. See the Show User Administration Menu setting for further information on this menu.

Setting Name: Enable Netware Connections Dialog

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

Registry Value Name: Enable NetWare Connections Dialog

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Enables/disables the NetWare Connections dialog. This menu item is displayed in the context menu of the Novell (N) system tray icon and in the context menu of Network Neighborhood.

Setting Name: Enable NetWare Copy Dialog

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

Registry Value Name: Enable NetWare Copy Dialog

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Enables/disables the NetWare file copy dialog. This menu item is displayed in the context menu of the selected directory or file.

Setting Name: Enable NetWare Utilities

Logical Value Type: OFF/ON

Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable NetWare Utilities  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the NetWare Utilities. This menu item is displayed in  
the context menu of the Novell (N) system tray icon.

Setting Name: Enable Novell Client Help  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Novell Client Help  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Novell Client help. This menu item is displayed  
in the context menu of the Novell (N) system tray icon.

Setting Name: Enable Novell Client Properties  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Novell Client Properties  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables viewing the Novell Client property pages. This menu  
item is displayed in the context menu of the Novell (N) system tray  
icon.

Setting Name: Enable Object Properties Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Object Properties Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Object Properties dialog. This menu item is displayed in the NetWare Utilities menu. See the Enable NetWare Utilities setting for further information on this menu.

Setting Name: Enable Password Administration  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Password Administration  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enable/disables password administration.

Setting Name: Enable Purge Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Purge Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the purge files dialog. This menu item is displayed in the context menu of the selected volume or directory on a server.



Setting Name: Enable Salvage Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Salvage Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the salvage dialog. This menu item is displayed in the context menu of the selected volume or directory on a server.

Setting Name: Enable Send Message  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Send Message Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies whether the Send Message function is enabled. This function is accessed from the Context menu for the selected server in Network Neighborhood.

Setting Name: Enable Send Message to Server Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Send Message To Server Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING

Help/Comment: Enable/disable the send message to server dialog. This menu item is displayed within the server context menu item Send Message. See the Enable Send Message Dialog setting for further information on this menu.

Setting Name: Enable Send Message to User Dialog

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Send Message To User Dialog

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Enable/disable the send message to server dialog. This menu item is displayed within the server context menu item Send Message. See the Enable Send Message Dialog setting for further information on this menu.

Setting Name: Enable Set Current Tree

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Set Current Tree

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Enables/disables setting the current tree. This menu item is displayed in the context menu of the selected tree in Network Neighborhood.

Setting Name: Enable Set Default Context

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Set Default Context  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables setting the default context. This menu item is  
displayed in the context menu of the selected container in Network  
Neighborhood.

Setting Name: Enable Show Parent Context  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Show Parent Context  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables showing the parent context. This menu item is  
displayed in the context menu of the selected container in Network  
Neighborhood.

Setting Name: Enable Systray Config Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Systray Config Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the systray config dialog. This menu item is  
displayed in the context menu of the Novell (N) system tray icon.

Setting Name: Enable Trustee Rights Dialog  
Logical Value Type: OFF/ON

Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Trustee Rights Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the trustee rights dialog. This dialog can be reached from a menu item in the context menu of a Volume or Directory or under the NetWare Utilities menu in the red N.

Setting Name: Enable Update Novell Client  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Update Novell Client  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Update Novell Client. This menu item is displayed in the context menu of the Novell (N) system tray icon.

Setting Name: Enable Who Am I Dialog  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]  
Registry Value Name: Enable Who Am I Dialog  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables the Who Am I dialog. This menu item is displayed in the context menu of the selected server or tree in Network Neighborhood.

Setting Name: Filter User List  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Send Message]  
Registry Value Name: Filter User List  
Default Registry Data: NO  
Registry Value Data Type: STRING  
Help/Comment: Enables/disables showing only users objects in the Send Message dialog.

Setting Name: Force Bindery Connections  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Connections]  
Registry Value Name: Force Bindery Connections  
Default Registry Data: "NO"  
Registry Value Data Type: STRING  
Help/Comment: Only allow bindery connections.

Setting Name: Make Receive Message Dialog TopMost  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Send Message]  
Registry Value Name: MakeRecMsgDlgTopMost  
Default Registry Data: NO  
Registry Value Data Type: STRING

Help/Comment: Forces the Receive Message Dialog Box to be a TopMost Window. This means the Dialog will stay visible even when it does not have focus.

Setting Name: Show Bindery Servers

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Browse Settings]

Registry Value Name: Show Bindery Servers

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Show/hide bindery servers from displaying in the NetWare Resource Browser and in Network Neighborhood.

Setting Name: Show Current Connections

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Browse Settings]

Registry Value Name: Show Current Connections

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Shows/hides the current connections from displaying in the NetWare Resource Browser and in Network Neighborhood.

Setting Name: Show Edit Login Script Item

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Menu Items]

Registry Value Name: Modify Login Script

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies whether the Edit Login Script item is available in the User Administration menu, The Show User Administration Menu parameter must be set to On for this parameter to be useful.

Setting Name: Show NDS Description  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Browse Settings]

Registry Value Name: Show NDS Description  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Shows/hides the NDS description. Setting this parameter to ON is only utilized when the Network Neighborhood is set to View Details. Setting this parameter to on displays the available NDS description beneath the Comment column of Network Neighborhood.

Setting Name: Show NDS Objects  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Browse Settings]

Registry Value Name: Show NDS Objects  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Show/hide NDS objects from displaying in the NetWare Resource Browser and in Network Neighborhood.

Setting Name: Show Novell System Tray Icon  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Systray Icon

Default Registry Data: "YES"

Registry Value Data Type: STRING

Help/Comment: If this parameter is enabled, the Novell icon appears in the System tray at the right-hand side of the task bar. Right-click the Novell icon to select from a list of Novell Client tasks. Double-click the Novell icon to log in to a NetWare tree or server.

Setting Name: Show Scheduler System Tray Icon

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable Scheduler Icon

Default Registry Data: "YES"

Registry Value Data Type: STRING

Help/Comment: If this parameter is enabled, the Novell Scheduler icon appears in the System tray at the right-hand side of the task bar. Right-click the Scheduler icon to select from a list of Scheduler tasks. Double-click the Scheduler icon to open the Scheduler.

Setting Name: Show User Administration Menu

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Menu Items]

Registry Value Name: Enable User Info

Default Registry Data: V

Registry Value Data Type: STRING

Help/Comment: Enables/disables the menu item for user administration. This menu item is displayed in the context menu of the selected server or tree in Network Neighborhood.



Setting Name:	Use NDS Dot Format for Browsing
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	ON
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\Network Provider \Browse Settings]
Registry Value Name:	Use NDS dot format
Default Registry Data:	"YES"
Registry Value Data Type:	STRING
Help/Comment:	Build Novell paths using dots to separate NDS context elements. If this is off then backslashes are used to separate NDS context elements.

## Default Capture Tab

Setting Name:	Number of Copies
Logical Value Type:	number
Range From:	1
Range To:	255
Default Value:	1
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\Network Provider \Capture Flags]
Registry Value Name:	Number of Copies
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	Specifies the number of copies to print.

Setting Name:	Form Feed
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	OFF
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\Network Provider \Capture Flags]
Registry Value Name:	Form Feed
Default Registry Data:	None (value not present in registry by default)

Registry Value Data Type:      DWORD  
Help/Comment:                If you want the printer to add blank piece of paper at the end of the print job, check this check box.

Setting Name:                 Enable Tabs  
Logical Value Type:         OFF/ON  
Range From:                 N/A  
Range To:                    N/A  
Default Value:              OFF  
Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
                              \Capture Flags]  
Registry Value Name:        Enable Tabs  
Default Registry Data:      None (value not present in registry by default)  
Registry Value Data Type:    DWORD  
Help/Comment:                If you want to print the specified number of spaces in place of tab characters, check this check box. If you don't want spaces to be printed in place of tabs, uncheck this check box. Byte-stream print jobs do not require tabs to be enabled.

Setting Name:                 Number of Spaces  
Logical Value Type:         number  
Range From:                 1  
Range To:                    18  
Default Value:              8  
Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
                              \Capture Flags]  
Registry Value Name:        Number of Spaces  
Default Registry Data:      None (value not present in registry by default)  
Registry Value Data Type:    DWORD  
Help/Comment:

Setting Name:                 Enable Banner  
Logical Value Type:         OFF/ON  
Range From:                 N/A  
Range To:                    N/A  
Default Value:              OFF  
Registry Key:                [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
                              \Capture Flags]

Registry Value Name: Enable Banner  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If you want a banner page for each print job, check this check box.

Setting Name: 1st Banner Name  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Capture Flags]

Registry Value Name: 1st Banner Name  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies the text printed on the upper half of the banner page. This text can be up to 12 characters long.

Setting Name: 2nd Banner name  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Capture Flags]

Registry Value Name: 2nd Banner Name  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specifies the text printed on the lower half of the banner page. This text can be up to 12 characters long.

Setting Name: Hold  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Capture Flags]  
Registry Value Name: Hold  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: To put a hold on print jobs, check this check box.

Setting Name: Keep  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Capture Flags]  
Registry Value Name: Keep  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If you want to keep print jobs in the print queue after they are printed,  
check this check box.

Setting Name: Notify  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\Capture Flags]  
Registry Value Name: Notify  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If you want to receive a message when the print job is printed, check  
this check box.

## Protocol Preferences Tab

Setting Name: Preferred Network Protocol  
Logical Value Type: Number

Range From: N/A  
 Range To: N/A  
 Default Value: 2  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
 \Policies\Network]  
 Registry Value Name: Preferred  
 Default Registry Data: 0x00000002  
 Registry Value Data Type: DWORD  
 Help/Comment: 6=IPX, 2=IP, 0=none The Client will wait up to one quarter of the

Name Resolution Timeout value to resolve the specified name to an address of the preferred network type. Setting this value to none allows the client to connect to the first address returned from one of the configured name space providers.

The Client tries to resolve the name with all configured Name Service Providers (preferred and non-preferred) four times. The first two times, any responses from the non-preferred protocol's Name Service Providers are ignored. If a response comes back on a non-preferred protocol first, the client will wait one quarter of the Name Resolution Timeout value on the chance that an Name Service Provider on the preferred protocol may eventually respond. If a preferred protocol Name Service Provider does not respond that quickly, then the client will use the non-preferred protocol resolution to find the server.

All configured name service providers are queried in parallel in order to resolve the name to an address. They are first queried with a cache flag that allows Name Service Providers who maintain a cache to attempt to resolve the name. (Currently, no Name Service Providers maintain a cache). If no Name Service Provider resolves the name then they are queried again without the cache flag, allowing all Name Service Providers to attempt to resolve the name. The client waits either the time specified by the Name Resolution Timeout, or until all the queried Name Service Provider's respond with either NOT\_FOUND or NO\_MORE.

Setting Name: Protocol->naming->IP (Host File)  
 Logical Value Type: Number  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
 \Policies\Network\IP\Address Resolution Providers\Configured]  
 Registry Value Name: 11  
 Default Registry Data: {AD518629-02B4-11d1-8FF9-00A0C925D248}  
 Registry Value Data Type: STRING

Help/Comment: Host File. If the string for this NSP is in the list under the "Configured" hive, then it is an active NSP.

Setting Name: Protocol->naming->IP (DNS)

Logical Value Type: Number

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network\IP\Address Resolution Providers\Configured]

Registry Value Name: 12

Default Registry Data: {CCBB7F70-2087-11d1-9004-00A0C925D248}

Registry Value Data Type: STRING

Help/Comment: DNS. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IP (NDS)

Logical Value Type: Number

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network\IP\Address Resolution Providers\Configured]

Registry Value Name: 2

Default Registry Data: {CCBB7F6F-2087-11d1-9004-00A0C925D248}

Registry Value Data Type: STRING

Help/Comment: NDS. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IP (SLP)

Logical Value Type: Number

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network\IP\Address Resolution Providers\Configured]

Registry Value Name: 5

Default Registry Data: {A18C57F8-17DA-11d1-8FFF-00A0C925D248}  
Registry Value Data Type: STRING  
Help/Comment: SLP. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IP (DHCP)  
Logical Value Type: Number  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network\IP\Address Resolution Providers\Configured]  
Registry Value Name: 6  
Default Registry Data: {FA85E061-FFBB-11d1-85E0-00A0C9249033}  
Registry Value Data Type: STRING  
Help/Comment: DHCP. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IPX (SAP)  
Logical Value Type: Number  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Policies\Network\IPX\Address Resolution Providers\Configured]  
Registry Value Name: 1  
Default Registry Data: {2399601D-BCBA-11d0-8FD7-00A0C925D248}  
Registry Value Data Type: STRING  
Help/Comment: SAP. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IPX (NDS)  
Logical Value Type: Number  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
 \Policies\Network\IPX\Address Resolution Providers\Configured]

Registry Value Name: 2

Default Registry Data: {CCBB7F6F-2087-11d1-9004-00A0C925D248}

Registry Value Data Type: STRING

Help/Comment: NDS. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

Setting Name: Protocol->naming->IPX (BIND)

Logical Value Type: Number

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
 \Policies\Network\IPX\Address Resolution Providers\Configured]

Registry Value Name: 4

Default Registry Data: {A18C57F7-17DA-11d1-8FFF-00A0C925D248}

Registry Value Data Type: STRING

Help/Comment: Bindery. If the string for this NSP is in the list under the "Configured" hive then it is an active NSP.

## LDAP Contextless Login Tab

Setting Name: Enable LDAP Treeless Login

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
 \NWLGE\LDAP Contextless]

Registry Value Name: Treeless Login Enabled

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: To enable treeless login, check this check box. Treeless login makes it possible to log in to the network without specifying a tree.

Setting Name: Enable LDAP Contextless Login

Logical Value Type: OFF/ON



Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Contextless Login Enabled  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If treeless is enabled, contextless is enabled and greyed out . To enable LDAP contextless login, check this check box. You must have LDAP Services for eDirectory\* installed on your corporate server hosting the corporate tree to take advantage of LDAP contextless login.

Setting Name: Enable LDAP Context Search Scope  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Context Search Scope Enabled  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: You can limit the search scope to a specific context or to a specific context and subtree.

Setting Name: Trees (list)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\Trees]  
Registry Value Name: 0,1,etc  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: 0,1,2 etc, treename. Lists trees running LDAP services that will be searched during login.

Setting Name: Contexts

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\Contexts]

Registry Value Name: 0,1,etc

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: 0,1,2 etc, one key per context. Lists the contexts in the tree that LDAP contextless login will search. Contexts will be searched in the order they appear in the list. Type the context as a distinguished LDAP context with comma delimiters (for example: ou=organizational\_unit,o=organization). LDAP contextless login will search for the user from the specified context in the tree. You can specify more than one context search scope. Context search scopes are searched in the order they appear in the list. You can rearrange the search order.

Setting Name: Search containers

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\Contexts]

Registry Value Name: Search Context And Subtree 0

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: 0=context only, 1=context and subtree

Setting Name: Servers (list)

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: No Default Entry

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\Servers]

Registry Value Name: 0,1,etc

Default Entry: 0,1,2 etc, value is IP address of server

Registry Value Data Type: STRING

Help/Comment:

Setting Name: LDAP Search Timeout

Logical Value Type: number

Range From: 1

Range To: 600

Default Value: 10

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers  
\Settings]

Registry Value Name: Search Timeout 0

Default Entry: No Default Entry

Registry Value Data Type: DWORD

Help/Comment: Specify the number of seconds that LDAP contextless login will search before a search is cancelled.

Setting Name: Connection Timeout

Logical Value Type: Number

Range From: 1

Range To: 600

Default Value: 5

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers  
\Settings]

Registry Value Name: Connection Timeout 0

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Specify the number of seconds that LDAP contextless login will search before a request is cancelled.

Setting Name: Unencrypted Data

Logical Value Type: number

Range From: 1

Range To: 9999

Default Value: 389

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers  
\Settings]

Registry Value Name: Port 0

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Select Unencrypted Data to enable passwords to be transmitted in clear-text format. Using unencrypted data is not as secure as using SSL.

Setting Name: SSL vs Clear text  
Logical Value Type: number  
Range From: N/A  
Range To: N/A  
Default Value: 1  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers \Settings]  
Registry Value Name: Clear Text 0  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment:

Setting Name: Encrypted Data (SSL)  
Logical Value Type: number  
Range From: 1  
Range To: 9999  
Default Value: 636  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers \Settings]  
Registry Value Name: SSL Port 0  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: To encrypt data using Secure Socket Layer (SSL), select Encrypted Data (SSL).

Setting Name: Certificate Name and location  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\LDAP\ Servers  
\Settings]  
Registry Value Name: Certificate 0  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: Specify the path to and the name of the certificate on the workstation  
that will be used by LDAP contextless login to establish a secure  
connection to the LDAP server.

## Settings Button

Setting Name: Allow Wildcard in Searches  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Allow Wildcards  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow wildcard searches for any of the search  
attributes in LDAP Services during login.

Setting Name: Display Context  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: ON  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Context  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user  
context during login.

Setting Name: Display E-Mail Address

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Email  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user's  
email address during login.

Setting Name: Display Full Name  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Full Name  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user's full  
name during login.

Setting Name: Display Given Name  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Given Name  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user's  
given name during login.

Setting Name: Display Surname  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Surname  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user's  
surname during login.

Setting Name: Display Telephone Number  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Telephone Number  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to display the user's first  
telephone number during login.

Setting Name: Display Unique ID  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Display Unique ID  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

- Help/Comment: Set this value to On to allow LDAP Services to display the user's unique ID during login.
- Setting Name: Search on E-Mail Address
- Logical Value Type: OFF/ON
- Range From: N/A
- Range To: N/A
- Default Value: OFF
- Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]
- Registry Value Name: Search Email
- Default Registry Data: None (value not present in registry by default)
- Registry Value Data Type: DWORD
- Help/Comment: Set this value to On to allow LDAP Services to search for users based on email address during login.
- Setting Name: Search on Full Name
- Logical Value Type: OFF/ON
- Range From: N/A
- Range To: N/A
- Default Value: OFF
- Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]
- Registry Value Name: Search Full Name
- Default Registry Data: None (value not present in registry by default)
- Registry Value Data Type: DWORD
- Help/Comment: Set this value to On to allow LDAP Services to search for users based on full name during login.
- Setting Name: Search on Given Name
- Logical Value Type: OFF/ON
- Range From: N/A
- Range To: N/A
- Default Value: OFF
- Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]
- Registry Value Name: Search Given Name



Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to search for users based on given name during login.

Setting Name: Search on Surname  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]

Registry Value Name: Search Surname  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to search for users based on surname during login.

Setting Name: Search on Telephone Number  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]

Registry Value Name: Search Telephone Number  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Set this value to On to allow LDAP Services to search for users based on their first telephone number during login.

Setting Name: Search on Unique ID  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]

Registry Value Name: Search Unique ID

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Set this value to On to allow LDAP Services to search for users based on unique ID during login.

Setting Name: Search on Username

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: ON

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]

Registry Value Name: Search Username

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Set this value to On to allow LDAP Services to search for users based on username during login.

Setting Name: User Search Failure

Logical Value Type: choice

Range From: N/A

Range To: N/A

Default Value: Prompt

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]

Registry Value Name: User Search Failure

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: 0=stop, 1=prompt, 3=continue. Defines the action taken by LDAP Treeless Login when it is unable to find the user in the first available tree. You can choose one of the following settings: Stop (end the search), Prompt (prompt the user to end the search or continue the search), and Continue (continue the search trying all subsequent LDAP servers in the server list).

## Single Sign-on Tab

Setting Name: Enable single sign-on  
 Logical Value Type: OFF/ON  
 Range From: N/A  
 Range To: N/A  
 Default Value: OFF  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
 Registry Value Name: Enable SSO  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: Enable/disable Novell Single-Sign-on.

## DHCP Settings Tab (for slp only)

Setting Name: Use Server  
 Logical Value Type: number  
 Range From: N/A  
 Range To: N/A  
 Default Value: 0  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\85]  
 Registry Value Name: KeyType  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: Queries the DHCP server for server information and sets this information in the Login Service section of the location profile selected from the drop-down list.

The value shown as the default for Login Service is the registry key that equates to the Login Service called 'Default'. If you want to use a different Login Service, you will need to find the corresponding registry key.

Setting Name: from Login Service (name) (Option 85)  
 Logical Value Type: STRING  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\85]

Registry Value Name: RegLocation

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: "SOFTWARE\Novell\Location Profiles\Services\{1E6CEEA1-FB73-BD76-00001B27DA23}\ Default\Tab1]\Server" equates to default.

Setting Name: KeyType

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\85]

Registry Value Name: KeyType

Default Registry Data: No Default Entry

Registry Value Data Type: DWORD

Help/Comment: 0=off, 1=on, 3=binary. If the DHCP Binary Data option is selected, the data received from the DHCP server is an IP address (binary data). If the Binary Data option is not selected, the data received from the DHCP server is a server name (string data).

Setting Name: Use Tree

Logical Value Type: number

Range From: N/A

Range To: N/A

Default Value: 0

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\86]

Registry Value Name: KeyType

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Queries the DHCP server for tree information and sets this information in the Login Service section of the location profile specified. The value shown as the default for Login Service is the registry key that equates to the Login Service called 'Default'. If you want to use a different Login Service, you will need to find the corresponding registry key.

Setting Name: from Login Service (name) (Option 86)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\86]  
Registry Value Name: RegLocation  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: "SOFTWARE\Novell\Location Profiles\Services\{1E6CEEA1-FB73-BD76-00001B27DA23}\ Default\Tab1]\Server" equates to default.

Setting Name: Use Context  
Logical Value Type: number  
Range From: N/A  
Range To: N/A  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\87]  
Registry Value Name: KeyType  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: 0=off, 1=on Queries the DHCP server for context information and sets this information in the Login Service section of the location profile specified. The value shown as the default for Login Service is the registry key that equates to the Login Service called 'Default'. If you want to use a different Login Service, you will need to find the corresponding registry key.

Setting Name: from Login Service (name) (Option 87)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \DHCP\Parameters]\Options\85]  
Registry Value Name: RegLocation

Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: STRING  
Help/Comment: "SOFTWARE\Novell\Location Profiles\Services\{1E6CEEA1-FB73-BD76-00001B27DA23}\ Default\Tab1]\Server" equates to default.

## DSCAT Contextless Login Tab

Setting Name: Enable  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ Graphical Login  
\NWLGEVZ Xcontext]  
Registry Value Name: RunContext  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: 1=enable Check this check box to enable contextless login.  
Contextless login makes it possible to log in to the network without  
specifying an eDirectory context.

Setting Name: Wildcard Searching Allowed  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ Graphical Login  
\NWLGEVZ Xcontext]  
Registry Value Name: AllowWild  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: 1=enable If you allow wildcard searching, you can use wildcards in the  
username, rather than having to enter the entire username.  
  
For example, a user with the username JLOPEZ could enter JLOPEZ\*  
as the search string.

Setting Name: Search Timeout  
Logical Value Type: number

Range From: 0  
 Range To: 999  
 Default Value: 2  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ Graphical Login  
 \NWLGE\Z Xcontext]  
 Registry Value Name: SearchTimeout  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: Specify the maximum amount of time (in seconds) that you want  
 Novell Login to search eDirectory for the specified user. If you set this  
 value too low, the search might time out before the user is located. If  
 you set it too high, a search for an invalid or unavailable user might  
 take too long.  
  
 You might set this value low to begin with. Then, if you experience  
 timeouts during searches, adjust the number upward slightly until  
 searches are consistently successful.

Setting Name: Tree-Catalog pairs (list)  
 Logical Value Type: List  
 Range From: N/A  
 Range To: N/A  
 Default Value: No Default Value  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ Graphical Login  
 \NWLGE\Z Xcontext\Catalogs]  
 Registry Value Name: <tree name>  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: STRING  
 Help/Comment: value is catalog for tree Specifies the location of each User object in  
 the eDirectory tree for NetWare 4 and later users using NDS. It does  
 not apply if you are logging in to a NetWare 3 server or a NetWare 4  
 server using bindery services.  
  
 The name context applies to any user logging in to a specified tree  
 using this workstation. Because it is possible to log in to multiple  
 trees, each tree has its own designated name context. You can  
 change the tree and the name context when you log in. However, a  
 user can have only one name context in any one tree.

## Update Agent Tab

Setting Name: Enable Update Agent

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]  
Registry Value Name: Agent Enabled  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: To enable the launching of the Novell Client Update Agent, check the Enable Novell Client Update Agent check box. The Update Agent checks for a new version of the Novell Client at the designated interval and from the designated locations. The Update Agent is launched as a part of the login process. If you do not want the Update Agent to launch, uncheck this check box.

Setting Name: Enable Automatic Update Agent  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]  
Registry Value Name: Enabled  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: If this check box is checked, the Login Extension launches the Client Update Agent after each successful login.

Setting Name: Update Agent launch interval  
Logical Value Type: Number  
Range From: 1  
Range To: 365  
Default Value: 7  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]  
Registry Value Name: Launch Interval  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD



Help/Comment: Set the interval (in days) that the Novell Client Update Agent will check for a new version of the Novell Client.

Setting Name: Update location

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]

Registry Value Name: Update Location Enabled

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Check to enable the Novell Client Update Agent to look for a new version of the Novell Client in the designated update location.

The Update Agent checks for updates in the following order of enabled locations:  
first, it checks the Update Location  
second, it checks the Previous Install Location  
and third, it checks the Novell Client Update Web Site Location.

Note: The Update Agent looks in each enabled location for valid file types and stops when it locates valid file types. Ensure that you have the latest files in the first location that the Update Agent searches.

Setting Name: Location (CUA)

Logical Value Type: STRING

Range From: N/A

Range To: N/A

Default Value: blank

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]

Registry Value Name: Update Location

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Specify the location where the Update Agent will check for new versions of the Novell Client software. This can be a UNC path, mapped drive, or URL.

Setting Name: Previous Install Location

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
\Client Update Agent]  
Registry Value Name: Previous Install Location Enabled  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: To enable the Novell Client Update Agent to look for a new version of  
the Novell Client software in the same location where the Novell Client  
software was installed from during the last install, check this check  
box. This location is not editable.  
  
The Update Agent check for updates in the following order of enabled  
locations:  
first, it checks the Update Location  
second, it checks the Previous Install Location  
and third, it checks the Novell Client Update Web Site Location.  
  
Note: The Update Agent looks in each enabled location for valid file  
types and stops when it locates valid file types. Ensure that you have  
the latest files in the first location that the Update Agent searches.

Setting Name: location (Current)  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation]  
Registry Value Name: Source Directory  
Default Registry Data: Location where install came from  
Registry Value Data Type: STRING  
Help/Comment: Displays the location where the current Novell Client was installed from.

Setting Name: Unattend file  
Logical Value Type: STRING  
Range From: N/A  
Range To: N/A  
Default Value: blank

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
\Client Update Agent]

Registry Value Name: Unattend File

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: STRING

Help/Comment: Specify the name of the unattend file that the Update Agent will use to determine if the Novell Client should be updated. The unattend file must be located in the Update Location or the Previous Install Location if they are enabled. The unattend file will not be used with the Novell Client Update Web Site.

Setting Name: Suppress Update Prompt

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
\Client Update Agent]

Registry Value Name: Suppress Update Prompt

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: To suppress the update prompt that appears when the Update Agent determines that an update is required, check this check box. The user will not be prompted and the update will start without intervention.

Setting Name: Support Pack Update

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\ NetWareWorkstation  
\Client Update Agent]

Registry Value Name: Service Pack

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: When this check box is checked, the update agent will check for a support pack as well as a new client version.

Setting Name: Administrator Rights

Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	ON
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\ NetWareWorkstation \Client Update Agent]
Registry Value Name:	Administrator
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	To ensure that the Novell Client Update Agent has Administrator rights on the workstation, disable this policy. The Update Agent must have Administrator rights to update the Novell Client. This is useful when the user who logs in to the workstation is not the workstation Administrator user.  If the policy s enabled, the Update Agent will be launched with the rights of the currently logged-in user.

## Keys not settable via Client Properties

Setting Name:	SLP Wild Card Last Level Only
Logical Value Type:	Number
Range From:	0
Range To:	1
Default Value:	1
Registry Key:	[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\ Services \NWSLP\Parameters]
Registry Value Name:	Wild Card Last Level Only
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD
Help/Comment:	This parameter controls where a wild card is added in a multi-component SLP 'where' clause. 1 = search only on the last component in a name. This is faster but can result in the "Tree of server cannot be found" error. (This is the default.). 0 = search on every component in a name. This is slower, but more robust.  See TID 10080035.

Setting Name:	SRVLOC Timing Issue Fix
Logical Value Type:	Number
Range From:	N/A

Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetwareWorkstation  
Registry Value Name: DependOnService  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This setting ensures that the SLP service is loaded and running  
before the Novell Client (nwfs.sys) attempts to load. This setting helps  
prevent "tree or server cannot be found" type errors.  
  
For W2K/XP - hex(7):53,00,52,00,56,00,4c,00,4f,00,43,00,00,00,00,00  
For NT - hex(7):53,52,56,4c,4f,43,00,00  
  
See TID 10092086.

Setting Name: Local Login  
Logical Value Type: Number  
Range From: 0  
Range To: 1  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Local Login  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This registry flag tells whether the user logged in locally or to NDS.  
Login only sets this flag, it doesn't read it. It is intended to be read by  
login extensions to determine their proper action.  
  
1=The user logged in only to the workstation.  
0=The user logged in to NDS and the workstation.  
  
Note that this setting is not suitable for Terminal Server environments,  
because the flag is not on a per-session basis.  
  
See TID 10086294.

Setting Name: TIME-DA-RECOVERY-INTERVAL  
Logical Value Type: number (value stored in seconds)  
Range From: N/A  
Range To: N/A  
Default Value: 30 seconds

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]

Registry Value Name: TIME-DA-RECOVERY-INTERVAL

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: The TIME-DA-RECOVERY-INTERVAL will control how frequently the next NORSP DA entry recovery attempt is scheduled. To use the default delay, there is no need to set the registry value.

If the Client gets no response from any DA at boot and reverts to multicasting, it will retry directly connecting to the DA's again after the time specified in the TIME-DA-RECOVERY-INTERVAL.

See TID 10055661.

Setting Name: TIME-0-CACHE-REPLIES

Logical Value Type: number (value stored in minutes)

Range From: N/A

Range To: N/A

Default Value: 1

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]

Registry Value Name: TIME-0-CACHE-REPLIES

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: The TIME-0-CACHE-REPLES will control how long the SLP attribute replies (containing a service name and corresponding IP address (es)) are stored on the workstation.

SLP Timers can be viewed by executing SLPINFO /T

See TID 10014466 for extensive SLP configuration instruction for the Novell Client.

Setting Name: TIME-7-QUIT-DA-DISCOVERY

Logical Value Type: Number

Range From: N/A

Range To: N/A

Default Value: 20 seconds

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\SRVLOC\Parameters]

Registry Value Name: TIME-7-QUIT-DA-DISCOVERY

Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: This setting works in conjunction with the TIME-DA-RECOVERY-INTERVAL setting.

These parameters control the NORSP DA entry "recovery":  
 When a NORSP DA entry recovery is attempted, it generates more than one packet. It uses an aging algorithm to prevent the recovery attempts from saturating the network.

The TIME-7-QUIT-DA-DISCOVERY will control how long each recovery attempt is allowed to last. During the time between when the TIME-7-QUIT-DA-DISCOVERY value is exceeded and before the next TIME-DA-RECOVERY-INTERVAL is scheduled there will be no DA discover/recovery packets being sent to the statically configured NORSP DA.

Rel Time	Total Time	Description
0 sec	0 sec	Initial DA Ping packet transmitted
1 sec	1 sec	First DA Ping packet retransmission
2 sec	3 sec	Second DA Ping packet retransmission
4 sec	7 sec	Third DA Ping packet retransmission
8 sec	15 sec	Fourth DA Ping packet retransmission

If a reply is received, no further retransmissions will occur. These retransmissions will continue until the time specified in the TIME-7-QUIT-DA-DISCOVERY parameter.

The TIME-DA-RECOVERY-INTERVAL will control how frequently the next recovery attempt is scheduled.

See TID 10055661.

Setting Name: threadWaitW2k  
 Logical Value Type: number  
 Range From: N/A  
 Range To: N/A  
 Default Value: 150 ms  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]  
 Registry Value Name: threadWaitW2k  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD

Help/Comment: Note: This registry key is used to specify the wait time for the thread used by nwsrvloc.dll and srvloc.sys to terminate. It applies only to Windows 2000 and higher. This wait can cause slow performance. If you see slowness on Windows 2000 or higher after setting this key, decrease the value.

See TID 10091085.

Setting Name: Bad Address Cache  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NetwareWorkstation\Parameters]  
Registry Value Name: Bad Address Cache  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: multi-value string  
Help/Comment: This setting adds the ability to put an address permanently in the Bad Address Cache. Enter the IP addresses of any servers you want to ensure that a Novell Client cannot contact. Each IP address should be separated by a , or in other words, by hitting the "Enter" key on your keyboard after entering each IP address.

The bad address cache is a list of unreachable addresses held in memory. If the Client needs to talk to an address, it sends a request to the protocol stack (IP or IPX) which tries to establish a connection with that address. If the protocol stack cannot establish a connection, that address gets marked as "bad" for five (5) minutes. There is no way to find out what addresses are currently populated in the workstation's bad address cache.

If the address is an IP address, the Novell client sends a request to the TCP/IP stack on the Windows workstation. The TCP/IP stack makes three requests (SYN requests) to connect to that IP address. If the TCP/IP stack does not get a response back to those three requests, the TCP/IP stack returns a failure to the Novell client. The Novell client then places that "bad" IP address into the bad address cache (in memory) for five minutes.

If the address is an IPX address, the Novell client sends a request to NWLINK.SYS on the Windows workstation. NWLINK.SYS is Microsoft's IPX protocol stack. NWLINK.SYS will RIP for that IPX address. If NWLINK.SYS does not get a RIP response back, then the IPX stack returns a failure to the client. The Novell client then adds the IPX address to the bad address cache (in memory) for five minutes.



The bad address cache was implemented to help improve performance to dead or bad addresses. It is enabled by default. However, in a network that is having communications problems (dropped packets, overloaded NetWare servers, etc.), the bad address cache can cause connectivity issues. Please see TID 10076045 titled "Slow login times when mapping a drive to a server that is down".

This setting (Bad Address Cache) allows you to prepopulate the bad address cache. Addresses added to the Bad Address Cache are read and stored in the Bad Address Cache (in memory) when the Client is loaded.

See TID 10086959 and TID 10093267.

Setting Name: Check SRVLOC Loaded Retries  
 Logical Value Type: Number  
 Range From: 0  
 Range To: No maximum, recommended maximum is 20  
 Default Value: 5  
 Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NetwareWorkstation\Parameters]  
 Registry Value Name: Check SRVLOC Loaded Retries  
 Default Registry Data: None (value not present in registry by default)  
 Registry Value Data Type: DWORD  
 Help/Comment: This setting was added to control new logic that verifies that SRVLOC.SYS is loaded. The number of retries with a 1 second delay is specified by this parameter. Whenever a request to check the link status is received by nwfs.sys it will first check for SRVLOC.SYS being loaded. If "Check SRVLOC Loaded Retries" is set to 0, no attempts will be made to check if SRVLOC.SYS is loaded. Good status is always returned after all retries even if SRVLOC.SYS is not loaded.

See TID 10086052 and TID 10086186

Setting Name: Check For Active DA Retries  
 Logical Value Type: Number  
 Range From: N/A  
 Range To: N/A  
 Default Value: 0  
 Registry Key: \CurrentControlSet\Services\SRVLOC\Parameters]  
 Registry Value Name: Check For Active DA Retries

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: NWFS.SYS asks SRVLOC.SYS to see if at least one active Directory Agent (DA) exists. This request is sent to SRVLOC.SYS whenever a request to check the link status is received by NWFS.SYS. This setting has been added to control the number of retries with a one second delay for the active DA check. If this parameter is set to 0 no attempts will be made to check for an active DA and good status will still be returned. In any case, after the specified retries, good status will be returned. If this setting is not present in the registry, no attempt will be made to verify that an active DA exists. In an environment with no DAs, this parameter must be set to 0 to avoid severe performance problems.

See TID 10086052 and TID 10086186

Setting Name: AutoAdminLogon

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]

Registry Value Name: AutoAdminLogon

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: See TID 10052847.

For a useful tool to aid in configuring AutoAdminLogon, consider AutoLog, a popular tool written by Tommy Mikelsen, available here: <http://www.novell.com/coolsolutions/tools/1035.html>

Setting Name: DefaultLocationProfile

Logical Value Type: String

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]

Registry Value Name: DefaultLocationProfile

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: String

Help/Comment: See TID 10052847

Setting Name: DefaultPassword  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: DefaultPassword  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: DefaultUserName  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: DefaultUserName  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: AutoAdminQueryNDS  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: AutoAdminQueryNDS  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: See TID 10052847

Setting Name: DefaultNDSContext

Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\ Login Screen]  
Registry Value Name: DefaultNDSSContext  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: DefaultNDSServer  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\ Login Screen]  
Registry Value Name: DefaultNDSServer  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: DefaultNDSTree  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\ Login Screen]  
Registry Value Name: DefaultNDSTree  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: DefaultNetWarePassword

Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\Login  
Screen]  
Registry Value Name: DefaultNetWarePassword  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: DefaultNetWareUserName  
Logical Value Type: String  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\Login  
Screen]  
Registry Value Name: DefaultNetWareUserName  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: String  
Help/Comment: See TID 10052847

Setting Name: NetWareAutoAdminLogon  
Logical Value Type: Number  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\NOVELL\NWGINA\ Login  
Screen]  
Registry Value Name: NetWareAutoAdminLogon  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: See TID 10052847

Setting Name: Search all Scopes

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Graphical Login  
\NWLGE\LDAP Contextless]  
Registry Value Name: Search all Scopes  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD Value: 0 or 1 (1 for default behavior, 0 to stop the search  
after first match)  
Help/Comment: By default, the LDAP Contextless Login feature included in the 4.9  
and higher client will search the entire tree for matching usernames  
and return ALL user names. This is desirable for many scenarios.  
However, this setting, enables a feature that limits the LDAP  
Contextless Login search to a context or a context and its Subtree.  
The ability to narrow the search scope benefits organizations that  
span WAN links or large tree designs. Additionally, multiple scopes  
can be configured for one client. The default behavior in a multi-scope  
LDAP Contextless Login configuration is to search all scopes and  
return all matching usernames. Some environments will find that  
continuing to search for usernames in all scopes even after a match  
has been found to be inhibitive due to slow WAN links and large trees.  
  
See TID 10093044.

Setting Name: DisableSynchronizeNTPassword  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: No Default Value  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\NWGINA\Security]  
Registry Value Name: DisableSynchronizeNTPassword  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD (Set to 1 to enable this setting)

**Help/Comment:** The "Change your Windows password to match your NetWare password after a successful login" checkbox that is displayed on the Windows-only credential dialog during login (for example, when the NDS account password did not match the Windows account password) can be disabled by using this setting. When this checkbox is in the disabled state, it is visible but cannot be selected or de-selected.

The [HKLM\Novell\NWGINA\Security] key does not exist by default, so if manually creating this value with REGEDIT.EXE, creation of the actual "Security" key will be required in addition to the DWORD "DisableSynchronizeNTPassword" value.

Be aware that the "Change your Windows password to match your NetWare password after a successful login" checkbox may also be disabled automatically by the presence and/or use of the NMAS client on the workstation. For more information see the document *Option to synchronize Windows password with NetWare password during login is disabled when NMAS is present*. (TID 10081981)

Note this "DisableSynchronizeNTPassword" configuration can be used concurrently with the "InitialSynchronizeNTPasswordState" may be used concurrently. For example the "InitialSynchronizeNTPasswordState" value can be set such that the checkbox control will be checked by default, and the "DisableSynchronizeNTPassword" value can be set such that the control is grayed out (disabled) such that the interactive user will not be able to accidentally or intentionally de-select the "Change your Windows password to match your NetWare password after a successful login" checkbox.

See TID 10077459.

Setting Name:	InitialSynchronizeNTPasswordState
Logical Value Type:	OFF/ON
Range From:	N/A
Range To:	N/A
Default Value:	No Default Value
Registry Key:	[HKEY_LOCAL_MACHINE\SOFTWARE\Novell\NWGINA\Security]
Registry Value Name:	InitialSynchronizeNTPasswordState
Default Registry Data:	None (value not present in registry by default)
Registry Value Data Type:	DWORD (Set to 1 to enable this setting)

**Help/Comment:** This setting makes it possible to control the initial state of the "Change your Windows password to match your NetWare password after a successful login" checkbox. (i.e. Whether the checkbox control is checked by default, or not checked by default). In absence of any specific configuration, the checkbox control will be unchecked by default. To cause the checkbox control to be automatically checked by default if & when it is displayed, create the following registry configuration:

The HKLM\SOFTWARE\Novell\NWGINA\Security key does not exist by default, so if manually creating this value with REGEDIT.EXE, creation of the actual "Security" key will be required in addition to the "InitialSynchronizeNTPasswordState" value.

Note that this configuration setting and "DisableSynchronizeNTPassword" may be used concurrently. For example the "InitialSynchronizeNTPasswordState" value can be set such that the checkbox control will be checked by default, and the "DisableSynchronizeNTPassword" value can be set such that the control is grayed out (disabled) such that the interactive user will not be able to accidentally or intentionally de-select the "Change your Windows password to match your NetWare password after a successful login" checkbox.

See TID 10077459

**Setting Name:** BadServer  
**Logical Value Type:** String  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** No Default Value  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NetwareWorkstation\Parameters]  
**Registry Value Name:** BadServer  
**Default Registry Data:** None (value not present in registry by default)  
**Registry Value Data Type:** REG\_MULTI\_SZ  
**Help/Comment:** Enter multiple values with a carriage return <CR> between each value, i.e. Server1<CR>Server2<CR>Server3.

This setting allow you to specify server names that you do not want to connect to or try and resolve its name. When a request to resolve a server name is processed, the names from the BadServer list are compared to the requested name. If there is a match then an error is returned. The best use of this key is to specify server names that belong to another network provider, like a Microsoft Share.

See TID 10086894 and TID 10065560.



Setting Name: Simple Unlock  
Logical Value Type: DWORD  
Range From: 0  
Range To: 2  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
Registry Value Name: Simple Unlock  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: Normally when a Windows NT/W2K/XP workstation is locked (either by pressing CTRL-ALT-DEL and selecting the "Lock Workstation" option or having the "Password protected" option selected on the screen saver), during unlock the user has the option of using either their NT credentials, NDS credentials or bindery-mode credentials (or administrative accounts for each) to unlock the workstation.

If this setting is not present or set to 0x00000000, the default behavior of presenting all of the NT, NDS and bindery-mode unlock options is followed. If the value is set to 0x00000001, only the NDS and bindery-mode options are allowed for unlock. If the value is set to 0x00000002, only the NT option is allowed for unlock.

Controls functionality delivered by LOGINW32.DLL.

See TID 10059068.

Setting Name: Cache Exclusive Open  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetwareWorkstation\Parameters]  
Registry Value Name: Cache Exclusive Open  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

**Help/Comment:** A performance problem can occur when an application opens a file and then reads the file by requesting data in small increments - often just a few bytes at a time. The Microsoft client for Novell Networks will read the complete file (cache the file) to the workstation, and subsequent reads will be made from the cached file. The Novell Client, in contrast, does exactly as the application requests and brings the file down in small increments. Since these read requests can be only a few bytes, this behavior can greatly impact performance and cause delays. This is not a problem if the application opens a file with an opportunistic locking (OpLock) call (see TID 10071902). However, if the application does not open the file in this way, the client does not cache the file because another user or application could be holding the file open and caching the file could cause data integrity problems.

In the case that the file open request is an exclusive request (deny write or deny all), the client can safely cache the file, since no other entity can open the file while it is open in exclusive mode.

This feature was added mainly for NetWare 4.x servers, which do not support OpLocking. There is a disadvantage when using Cache Exclusive Open instead of OpLocking. With OpLocking, when the file is closed, it is placed on a close behind list, and closed some seconds later (Lazy Close). That way, if the user immediately reopens the file, it is not necessary to re-read the file from the network device. With Cache Exclusive Open, the Lazy Close mechanism is not used, and the file is immediately written to the network. If the file is then reopened, it must be re-read from the network device.

To disable the feature, simply set the entry to 0 (zero).

See TID 10076527.

**Setting Name:** IP Cost Timeout

**Logical Value Type:** Number

**Range From:**

**Range To:**

**Default Value:** 370000(Hex)

**Registry Key:** [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetWareWorkstation\Parameters]

**Registry Value Name:** IP Cost Timeout

**Default Registry Data:** None (value not present in registry by default)

**Registry Value Data Type:** DWORD

**Help/Comment:** This setting allows you to change the aging timeout value for the IP costing solution. The value is in milliseconds. 370000Hex = 3600000Dec = 1Hour.

See TID 10064190.

Setting Name: Extended Attribute Support

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: OFF

Registry Key: \CurrentControlSet\Services\NetWareWorkstation\ Parameters]

Registry Value Name: EA Support

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD (Set to 1 to enable)

Help/Comment: Various problems are caused by the presence of certain extended file attributes. Starting with NetShield v4.6, McAfee started putting extended attributes on files scanned by NetShield. Placing extended attributes on the files is called Session Stamping. This extended attribute information contains information that NetShield uses. Placing extended attributes on the files is on by default.

With session stamping, extended attributes are also placed on directories. The problem arises when attempting to copy directories with extended attributes to a local disk created with a FAT32 partition. When this is done, an error is returned, since FAT32 does not support extended attributes on directories.

See TID 10072943.

Setting Name: NetWareRedirector

Logical Value Type: String

Range From: N/A

Range To: N/A

Default Value: NetwareRedirector

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \NetwareWorkstation\NetworkProvider]

Registry Value Name: NetwareRedirector

Default Registry Data: NetwareRedirector

Registry Value Data Type: String

Help/Comment: This value is set when the client is installed. Novell has seen cases where this value has been changed to "NetWareWorkstation" by another process. This can cause performance problems.

See TID 10080438.

Setting Name: DisableCommonNameParse

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: OFF  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login\ Tab Settings  
\NT Credentials]  
Registry Value Name: DisableCommonNameParse  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD (Set to 1 to enable this setting [to disable the parser])  
Help/Comment: In the Novell Client 4.83 for Windows NT/2000/XP and later, the default behavior when the "Username" field on the "Windows" tab is blank and the user types in a fully-distinguished NDS object name in the main "Username" field is to parse & mirror only the "common name" portion of the NDS object name into the Windows "Username" field.

For example, if the Windows "Username" field was initially blank and the user typed in ".MyUser.Department.Org" in the main "Username" field, only "MyUser" will be mirrored / echoed over to the Windows "Username" field as the Windows account name that will be attempted for login. This allows for typing in a fully-distinguished NDS username into the main "Username" field, and still receiving only the typically valid portion of that NDS username (just the common name portion, without the NDS context included) as the default Windows username to attempt logging in with.

DisableCommonNameParse allows for this default behavior to be disabled, if for any reason the username being typed into the main "Username" field should not be parsed according to this rule when the NDS username is being mirrored / echoed over to the Windows "Username" field to provide the Windows account name to attempt logging in with. For example, if Windows account names had been created containing dots within the account names, and these dots needed to be retained rather than being parsed as NDS context delimiters.

Note that the "Tab Settings" key may not exist on a default installation of the client, and may need to be created, along with the "NT Credentials" key and the "DisableCommonNameParse" value. Do not confuse this key with the "TabInfo" key which may exist.

See TID 10060720.

Setting Name: Login When NWGina Not Loaded  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider\Initial Login]

Registry Value Name: Login When NWGina Not Loaded

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: String (Set to "No" to enable this setting)

Help/Comment: This setting prevents the Novell Login appearing when NWGINA.DLL is not acting as the primary GINA on a workstation. Normally the Novell Login would appear immediately after the primary login by whichever GINA is installed on a workstation. This setting prevents that invocation of the Novell Login, allowing the user to login to the workstation without seeing the Novell Login appear.

When MSGina is used for initial authentication, the Novell Client should check this registry key before putting up the Login dialog. If the value data is "No", the Novell Client will NOT put up the Novell Login dialog. If the value data is anything else, or the value does not exist, the Novell client WILL put up the Novell Login dialog (the default behavior).

Note: The "Initial Login" key may not already exist, and will need to be created, along with the "NWGina Not Loaded" value.

See TID 10059708.

Setting Name: DontDisplayLastUserName

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: 0

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Winlogon]

Registry Value Name: DontDisplayLastUserName

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: String

Help/Comment:           0 = Display last logged on user name  
                               1 = Don't display last logged on user

This is a Windows logon policy which the Novell Client also honors, for controlling whether the last username who logged in is displayed in the login dialog by default the next time the login dialog is presented.

Note on Windows 2000 and later, this [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\WindowsNT\ CurrentVersion\Winlogon] location for "DontDisplayLastUserName" is secondary to the Windows system policies location, [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\ CurrentVersion\policies\system]. Meaning that if the "DontDisplayLastUserName" settings between these two locations do not agree, it's the latter location's setting which will actually be in force.

After Upgrade to Windows 2000 Last Logged On User Name Displayed (Windows 2000 and later) <http://support.microsoft.com/?id=237890>

Hiding the Last Logged On Username in the Logon Dialog (Windows NT 4.0) <http://support.microsoft.com/?id=114463>

Setting Name:            Search All Suffixes

Logical Value Type:     OFF/ON

Range From:            N/A

Range To:               N/A

Default Value:         0

Registry Key:           [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ \Services\Nwdns\Parameters]

Registry Value Name:   Search All Suffixes

Default Registry Data:  None (value not present in registry by default)

Registry Value Data Type:  DWORD

Help/Comment:         The Client is designed to only search the "search suffixes" if the "Append these DNS suffixes" option is selected in the Advanced TCP/IP (DNS tab) radio button is selected. However, with this setting (Search all Suffixes) set on (1), "search suffixes" will be used first and then all other suffixes (i.e. primary and connection-specific DNS suffixes) will be tried.

                          See TID 10092868.

Setting Name:           Nwws2nds

Logical Value Type:     OFF/ON

Range From:            N/A

Range To:               N/A

Default Value: 0 (OFF)  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Winsock 2]  
Registry Value Name: Nwws2nds  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This setting enabled NDS resolution over the Winsock2 interface.  
Novell recommends that this setting be disabled.  
  
See TID 10081106.

Setting Name: DisableDFS  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: 0  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\Mup]  
Registry Value Name: DisableDFS  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD  
Help/Comment: This setting enables a feature in MUP.SYS so that, if the redirector  
with the highest priority is attempted first with a successful response,  
those redirectors with lower priorities are then bypassed and the  
connection is made through the redirector with the highest priority.  
  
See TID 10068696.

Setting Name: IPXCosting  
Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: 1  
Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services  
\NetWareWorkstation\Parameters]  
Registry Value Name: IPXCosting  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD

**Help/Comment:** This setting disables IPX costing on the Client. With this setting off (0), the Client will not RIP to discover the cost (hops and ticks) of IPX routes.

Some applications, such as ZENworks Novell Application Launcher (NAL) can reflect slow performance when both IP and IPX are enabled on the Novell Client workstation, but not on the NetWare server. Or, if IPX is turned off at the routers, the Client will never receive a response to its IPX RIP requests.

Note: Add this registry value only if IPX is not routed across the network. Turning off IPX costing in an environment where IPX is routed could result in unpredictable results, as the client will not attempt to determine which is the closet IPX server, and could connect to any IPX server anywhere on the network -- even across wan links.

See TID 10050790.

**Setting Name:** Grace login, force user to change password  
**Logical Value Type:** OFF/ON  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** N/A  
**Registry Key:** [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Login]  
**Registry Value Name:** ForceGraceLoginPasswordChange  
**Default Registry Data:** None (value not present in registry by default)  
**Registry Value Data Type:** String

**Help/Comment:** This setting forces the user to change their password at the last grace login. With this settings activated, when the password expires, the password must be changed in order to successfully log in. This means that the user cannot skip the change password dialog, if the grace login remaining count is 1 or lower. The feature works like and endless loop out of which you only can get out after changing the password successfully. Set this string value to 1.

See TID 10063636.

**Setting Name:** Specify port for SLP  
**Logical Value Type:** Number  
**Range From:** N/A  
**Range To:** N/A  
**Default Value:** N/A



Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: Slp Port

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: This registry setting forces the Novell Client to use port 427 when communicating with the SLP DA. This can resolve a problem reported with Windows XP SP2 which results in "Tree or Server not found" type messages. SLPINFO /ALL shows the DA as being in the NORSP state. Traces show the workstation is sending requests but does not receive responses. It appears that there is problem with the Dynamic IP port on the workstation when communicating with the SLPDA server on port 427 (0x000001ab). Set the DWORD value to 000001ab.

See TID 10095407.

Setting Name: Use single equals for SLPv2

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: 00000000

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\ Services \SRVLOC\Parameters]

Registry Value Name: Use SingleEquals in Where (V2)

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD

Help/Comment: Setting this value to 00000001 resolves a problem communicating with the OpenSLP Directory Agent over SLPv2. Specifically, an SLPv2 service request should only have one equal between an attribute name and an attribute value in the where clause instead of two equals. The default is to use double equals. If this DWORD parameter is nonzero single equals will be used. Changes have been made to the NetWare DA to accept either single or double equals, but many existing installations are still using the old DA code that requires double equals. This is why the default for double equals was chosen. Srvloc.sys will reformat the where clause passed by either an application or by nwslp.sys to only contain single equals if this registry entry is nonzero. This registry setting requires a post 4.9 SP2 SRVLOC.SYS dated 13Dec2004 or later.

See TID 10095884.

Setting Name: Show NT Connections In Change Password List

Logical Value Type: OFF/ON  
Range From: N/A  
Range To: N/A  
Default Value: 1  
Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Novell\Network Provider  
\NetWare Utilities]  
Registry Value Name: ShowNTConnectionsInChangePasswordList  
Default Registry Data: None (value not present in registry by default)  
Registry Value Data Type: DWORD (Set to 0 to disable this setting)  
Help/Comment: With this feature enabled (set to 1), the user can change the NetWare password and the Windows password will be set to the same value. Turning it off (set to 0) leaves the passwords separate unless they are synchronized through some other means (e.g. DirXML).

If this key has a value of zero, password synchronization is disabled at three points in the client.

1. In NWGINA - we gather a password from login and use it to authenticate to NetWare. NWGINA then attempts to login to the local workstation or to the Domain with the same password. If it is unable to login with this password, NWGINA will prompt for a new password, and incidentally ask if the Windows password should be set to the same value as the NetWare password (synchronizing them.) With the above key set to zero, we don't offer this prompt.
2. If we detect an expired password on login, we prompt for a new one. If NetWare and Windows passwords were already synchronized, we offer to keep them synchronized by setting the Windows password at the same time as we set the NetWare password. If the above key is zero, we do not try to keep them synchronized.
3. When the user presses <CTL>-<ALT>-<DEL> and chooses to change passwords, we display all the current connections and offer to synchronize the new password out to all of them (the list includes both Windows and NetWare connections.) If the above key is zero, we do not display Windows connections in this synchronization list; only NetWare ones.

If this key is missing, or has a value of 1, password synchronization will be enabled.

See 10097062.

Setting Name: GinaDLL  
Logical Value Type: STRING  
Range From: N/A

Range To: N/A

Default Value: NWGINA.DLL

Registry Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon]

Registry Value Name: GinaDLL

Default Registry Data: NWGINA.DLL

Registry Value Data Type: STRING

Help/Comment: After installing the Novell Client, this value is set to "NWGINA.DLL". If another GINA (such as MSGINA.DLL, CTXGINA.DLL, AWGINA.DLL, etc.) is wanted, this value needs to be changed to reflect the name of the new GINA DLL.

See 2950350.

Setting Name: NoLogoDisplay

Logical Value Type: OFF/ON

Range From: N/A

Range To: N/A

Default Value: No Default Value

Registry Key: [HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NetWareWorkstation\Parameters]

Registry Value Name: NoLogoDisplay

Default Registry Data: None (value not present in registry by default)

Registry Value Data Type: DWORD (Set to any value to enable this setting)

Help/Comment: If using an alternative Gina (not NWGINA.DLL), the Novell Splash Screen will appear subsequent to the user's initial (non-Novell) login. The Novell Client Splash Screen is embedded in the NOVNPNT.DLL and cannot be removed safely from this file. However, it can be disabled by creating this registry setting. To disable this setting, remove the key entirely, since the existence of this setting will enable this setting.

See 10054281.