

Serv-U[®] File Server Database Integration



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Introduction

Serv-U (http://www.Serv-U.com/) is a file server that allows end users to transfer files via FTP, FTPS, SFTP, web browsers, and mobile devices. Serv-U runs on either Windows or Linux and supports both IPv4 and IPv6 networks. In addition, it runs natively on both 32-bit and 64-bit versions of Windows and Linux, taking advantage of performance benefits inherent in 64-bit computing.

To authenticate end users Serv-U can use its own user database or an external collection of user and group information. The two types of external collections supported today are Windows Active Directory (on Windows-deployed servers only) and relational databases accessible via ODBC. This paper discusses the latter case: how to use a relational database accessible via ODBC to provide Serv-U with user and group information.

Serv-U MFT Server supports integration with external database engines like Microsoft SQL Server, MySQL, PostgreSQL, Oracle, and more. Serv-U requires only an ODBC connection name, username, and password to an empty database to integrate with any supported database engine. Windows provides ODBC functionality via the "Data Sources" menu in the Control Panel, while Linux provides this functionality via the "unixODBC" package, found in standard Linux repositories. Storing users in an ODBC database can provide much faster response times when user counts grow above several thousand, and also makes the user list accessible to back-end user provisioning systems.

This manual describes how to authenticate end users with relational databases. Two common scenarios are covered:

- Serv-U builds a new database for its own use
- A Serv-U connects to an existing database shared with other applications or services



Integrating With A New Database

To set up Serv-U to populate an empty database:

- Create a new empty database on the relational database of your choice. (Refer to your Microsoft SQL Server, SQL Database, MySQL, or Postgres manual or consult with your local DBA if you need help doing this.)
- 2. Create an ODBC connection to your database. For more information, see "Creating an ODBC Connection".
- 3. Navigate to the **Domain Details > Database** menu in Serv-U.
- 4. Ensure that the **Automatically create required tables** and the **Automatically create required columns** options are both enabled.
- 5. Enter the Data Source Name (DSN) (see "Creating an ODBC Connection"), and the user name and password used to access the database.
- 6. Click Save.
- Test the ODBC connection by creating a new user account in the Users > Database Users
 menu (or Global Users > Database Users), and see if the user is correctly displayed in the
 list. Errors can be reviewed in the Domain Activity > Log menu.

Serv-U will proceed with the setup and create all the necessary tables and columns to begin database user storage immediately.

Additional Domains

Serv-U supports the setup of multiple Domains, which are collections of Users and Groups bound by common settings, such as a common Fully Qualified Domain Name or client company. When Serv-U is set up this way, each Domain in Serv-U should be configured with its own database.

Global Users and Groups

Global Users and Groups, which are special Users and Groups that can access any Serv-U Domain, can also be stored in a database. Like additional Domains in Serv-U, the Global Users and Groups should also be configured on their own database.



Integrating With An Existing Database

Serv-U can be tied into an existing database that contains users and groups shared and/or managed by another application. Since Serv-U's default setting is to generate all the standard tables and columns when the Save button is clicked, custom deployments must be carried out with more planning. To initially connect Serv-U to the database:

- 1. Create an ODBC connection to your existing database. For more information, see "<u>Creating an ODBC Connection</u>".
- 2. Navigate to the **Domain Details > Database** menu in Serv-U.
- 3. Disable the **Automatically create required tables** and the **Automatically create required columns** options in Serv-U to prevent unnecessary table creation.
- 4. Enter the Data Source Name (DSN) (see "<u>Creating an ODBC Connection</u>") that was created earlier, the username, and the password to access the database.
- 5. Click Save.

The actual work to integrate Serv-U with the database begins at this point. Via the **User Table Mappings** and **Group Table Mappings** menus, Serv-U must be configured with the correct table names with which to integrate with, and which field names to use for its various database attributes. For a comprehensive list of all attributes and standard labels used by Serv-U, see the accompanying documentation in Excel spreadsheet format.

Additional Domains

Serv-U supports the setup of multiple Domains, which are collections of Users and Groups bound by common settings, such as a common Fully Qualified Domain Name or client company. When Serv-U is set up this way, each Domain in Serv-U should be configured with its own database.

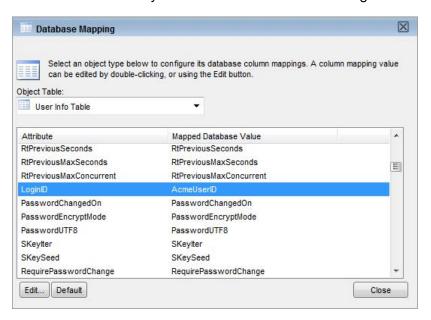
Global Users and Groups

Global Users and Groups, which are special Users and Groups that can access any Serv-U Domain, can also be stored in a database. Like additional Domains in Serv-U, the Global Users and Groups should also be configured on their own database.

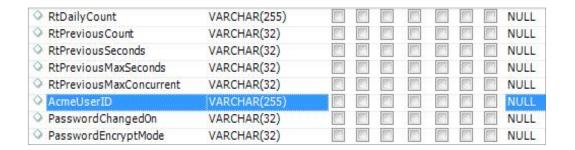


Custom Database Mapping

For an example of how custom mapping can be accomplished, see the example image of the User Info Table in Serv-U. This table contains the users and user settings in a Serv-U Domain. For the purpose of integrating with an existing database, we have renamed the "Login ID" attribute to "AcmeUserID", which is the field in our MySQL database that contains Login IDs.



Similarly, in the MySQL Workbench, we can see the field AcmeUserID shown, which can be used by existing account management systems for user account provisioning.





Creating an ODBC Connection

Serv-U uses ODBC connections on both Windows and Linux to provide connections to your relational database. Below are directions on creating ODBC connections on both Windows and Linux systems. Specific directions for creating and managing new databases for specific database engines are not covered in this document – for directions specific to your database engine, refer to your database documentation or consult with your local database administrator (DBA).

<u>Creating A New Windows ODBC Connection</u>

To allow Serv-U on Windows to access a database, an ODBC connection must first be established in Windows. To establish this connection, follow the steps below:

- 1. Open the Control Panel > Administrative Tools > Data Sources (ODBC) menu.
- 2. If Serv-U is running as a service, open the System DSN tab. If Serv-U is going to run as an application (this is uncommon), open the User DSN tab.
- 3. Click **Add**, select the data source to be used (most common are "SQL Server" for Microsoft SQL Server 2000, "SQL Native Client" for Microsoft SQL Server 2005 and SQL Server 2008, and "MySQL ODBC 3.51 Driver" for MySQL), and then click **Next**.
- 4. Specify the username and password for the database server, as well as the specific database that will be in use (these steps will vary based on database and ODBC driver).

Testing New Windows DSN

To test the new Windows DSN and ensure that it is able to connect to the database, open the ODBC connection properties in the **Data Sources** menu. The ability to test will depend on the ODBC driver for your database, but most database ODBC drivers, like those used by Microsoft SQL Server, MySQL, and Oracle, support a "Test" button that allows Windows to check if the connection is functional.

Creating A New Linux ODBC Connection

To allow Serv-U on Linux to access a database, the empty database on the database server must first be created, as with Windows. Then, an ODBC connection can be established in Linux. This requires that the following packages first be installed on the Linux server:

mysql-connector-odbc
posgressql-odbc
unixODBC

There are two kinds of Data Source Names (DSNs) - User DSNs, which are available in the user context only, and System DSNs, which are available for the whole system and for all users. Precedence is IMPORTANT - if you have identically named DSNs in the User and System levels, the User DSN takes precedence. User DSNs are created in ~/.odbc.ini. System DSNs are created in /etc/odbc.ini. Remember that you must be logged in as root to make changes to /etc/odbc.ini. Since Serv-U will typically be running as a service, creating a System DSN is recommended. To create your new DSN, use the formats below for MySQL and Postgres:



```
[MySQL-test]
Description = MySQL test database
Trace = Off
TraceFile = stderr
Driver = MySQL
SERVER = YOURIPADDRESS
USER = USERNAME
PASSWORD = PASSWORD
PORT = 3306
DATABASE = YOURDATABASE
[PostgreSQL-test]
Description = Test to Postgres
Driver = PostgreSQL
Trace = Yes
TraceFile = sql.log
Database = YOURDATABASE
Servername = YOURIPADDRESS
UserName = USERNAME
Password = PASSWORD
Port = 5432
Protocol = 6.4
ReadOnly = No
RowVersioning = No
ShowSystemTables = No
ShowOidColumn = No
FakeOidIndex = No
ConnSettings =
```

The names in brackets should be adjusted to your needed DSN name string.

Testing New Linux DSN

Testing the new DSN can be performed using the "isql" application, using the syntax below.

```
[rhinosoft@rhinodev ~]$ isql %DSN% -c -v
```

Be sure to replace %DSN% with the name of your DSN. This will allow you to confirm whether your DSN is operating. Remember that if you have identically named DSNs in the Root and User levels, the User level DSN takes precedence.



Basic Database Schema

Serv-U supports a wide range of statistics-gathering and feature-related fields that are not necessary for basic file transfer functionality. At a very basic level, Serv-U relies on the following fields to be present to support authentication and file access:

Users Table

Table Name – The name of the table containing users. "SUUsers" by default.

LoginID - String value containing the username of the account.

PasswordChangedOn - Integer value calculated using time_t, showing the last date the password was change

PasswordEncrypted - If the password is encrypted using the methods described in the following section, "Generating Encrypted Passwords", this value must be 1. If the password is stored plaintext, enter 0.

HomeDir - Enter the full path to the user's home directory

LockInHomeDir - If the user must be locked into their home directory, enter 1. If not, enter 0

UserDirAccess Table

Table Name – The name of the table containing groups. "UserDirAccess" by default.

LoginID – String value containing the username of the account.

SortIndex - The order in which the rule will be processed for the user specified in "LoginID".

Dir - The directory of the Dir Access rule, stored in true format (C:\ftproot\user,

\\servername\files\folder, or /usr/ftproot, no escape characters needed).

Access - The privileges granted, calculated using the directions in the following section, "Generating Directory Access Values".

MaxSize - If applicable, the maximum size the directory may reach before no more uploads are allowed.

For a comprehensive list of all tables and fields that Serv-U supports as well as the default values, see the "Schema Reference" section.

Data Concurrency

Information about user accounts is loaded into memory when a user logs into Serv-U. If a change to a user account is written manually to the database, it can cause this information to be overwritten. Manually coded mechanisms must be able to wait for a user to log off before writing changes to ensure they are saved properly.



Generating Special Values

Generating Encrypted Passwords

By default, Serv-U passwords in the database are stored in an encrypted format so that if the database is compromised, the passwords on the server cannot be stolen. Serv-U uses a one-way MD5 hash, with salt, to ensure the safety of the password. Encrypted passwords can be disabled if necessary in the **Domain Limits & Settings > Limits > Password** menu, in the **Password Encrypt Mode** option. However, using encrypted passwords is recommended for maximum security.

To generate a Serv-U compatible encrypted password for insertion into an ODBC user database, two random characters (the 'salt' - in the range a..z, A..Z) are added to the beginning of the clear-text password. This is then hashed using MD5 and the resulting hash is hex-encoded. The result of this is written as plain-text starting with the two salt characters followed by the hex-encoded hash.

The algorithm works as below:

Action	Result
Password is established	TestPassword
Two salt characters are added to increase complexity	cbTestPassword
Result is hashed using MD5 and displayed in hexadecimal	8EA58F0751BAA5AF391253F7DADD3D46
Two salt characters are added to the beginning of previous hash	cb8EA58F0751BAA5AF391253F7DADD3D46

When verifying a user's password, Serv-U will do the same. It parses the salt from the user's stored password (i.e., "cb" in this case), prepends it the password the user sent to it by the client, MD5 hashes it, and compares the result with the stored hash. If the values are equal, then the entered password is correct.

Generating Directory Access Rules

When creating users directly in a database it is necessary to tell Serv-U programmatically what permissions the user will be granted. The permissions must be specified via the method outlined below:

To calculate the value of a DirAccess entry, the appropriate values (represented in hexadecimal below) must be added and converted to decimal, then used in the DirAccess column of the CSV file. Each value represents a specific bit which can be turned on or off by adding or removing that value. For example, to grant Read/Write/List access, you add:

1 +2



+100 =103

This value must then be converted to hex, which can be done by opening the Windows Calculator (Start > All Programs > Accessories > Calculator), changing it to Scientific Mode (View > Scientific Mode), selecting Hex, typing in the value, then selecting "Dec" for an automatic conversion. For example, hexadecimal 103 and decimal 259 are the same value. 259 is the value that should be entered in the DirAccess column for the appropriate user. The values of all permissions are listed below.

File Permissions

Read=0x00000001 Write=0x00000002 Append=0x00000004 Delete=0x00000008 Rename=0x00000010 Execute=0x00000020

Directory Permissions

List=0x00000100 Create=0x00000200 Remove=0x00000400 Rename=0x00000800

Subdirectory Permissions

Inherit=0x00001000



Example Code

To aid in the deployment of database integration, we have provided sample code for the special values used in the Serv-U Database: encrypted passwords, and directory access calculations. The example are provided in PHP, VB.NET, and C#.NET.

Generating Encrypted Passwords

PHP

```
// MD5 of specified string plus two leading salt characters
// Used in Serv-U's "MD5" hashes
// Provided to the public domain by Rhino Software, Inc.
(http://www.RhinoSoft.com)
// INPUT: $strPwdOrig (a string containing a plaintext password)
// OUTPUT: $strDBValue (a string containing the value to insert or check in
the database)
//
// This is the password to "one way encrypt"
$strPwdOrig = "TestPassword"; // MAKE THIS VALUE DYNAMIC IN PRODUCTION
echo "|Original Password:".$strPwdOrig."|"; // REMOVE THIS LINE IN
PRODUCTION
//
// This is the set of characters used in the two-character salt (note
hardcoded length)
$strSaltChars =
"0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefqhijklmnopqrstuvwxyz";
// Generate and display the salt
$strSalt = substr($strSaltChars, rand(1, 62), 1);
$strSalt = substr($strSaltChars, rand(1, 62), 1).$strSalt;
$strSalt = "cb"; // UNCOMMENT THIS TO TEST EXAMPLE IN SERV-U MANUAL
echo "|Salt:".$strSalt."|"; // REMOVE THIS LINE IN PRODUCTION
//
$strPwdHash = md5($strSalt.$strPwdOrig);
echo "|Encrypted Password:".$strPwdHash."|"; // REMOVE THIS LINE IN
PRODUCTION
//
$strDBValue = $strSalt.$strPwdHash;
echo "|Value in Database:".$strDBValue."|"; // REMOVE THIS LINE IN
PRODUCTION
```

VB.NET

```
' MD5 of specified string plus two leading salt characters
' Used in Serv-U's "MD5" hashes
' Provided to the public domain by Rhino Software, Inc.
(http://www.RhinoSoft.com)
```



```
' INPUT: $strPwdOrig (a string containing a plaintext password)
' OUTPUT: $strDBValue (a string containing the value to insert or check in
the database)
' This is the password to "one way encrypt"
Dim strPwdOrig as String = "TestPassword" ' MAKE THIS VALUE DYNAMIC IN
PRODUCTION
Response.Write("|Original Password:" + strPwdOrig + "|") ' REMOVE THIS
LINE IN PRODUCTION
' This is the set of characters used in the two-character salt (note
hardcoded length)
Dim strSaltChars as String =
"0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefqhijklmnopqrstuvwxyz"
' Generate and display the salt
Dim rand As New Random()
Dim strSalt as String = ""
strSalt = strSaltChars.Substring(rand.Next(62), 1) +
strSaltChars.Substring(rand.Next(62), 1)
strSalt = "cb" ' UNCOMMENT THIS TO TEST EXAMPLE IN SERV-U MANUAL
Dim x As New System.Security.Cryptography.MD5CryptoServiceProvider()
Dim bs() As byte = System.Text.Encoding.UTF8.GetBytes(strSalt + strPwdOrig)
bs = x.ComputeHash(bs)
Dim sbTemp As System.Text.StringBuilder = new System.Text.StringBuilder()
Dim i = -1
Dim strPwdHash as String = ""
For i = 0 To bs.Length - 1
  strPwdHash &= bs(i).ToString("x").PadLeft(2, "0")
Response.Write("|Encrypted Password:"+strPwdHash + "|") ' REMOVE THIS LINE
IN PRODUCTION
Dim strDBValue as String = strSalt + strPwdHash
Response.Write("|Value in Database: "+strDBValue + "|") ' REMOVE THIS LINE
IN PRODUCTION
End Sub
C#.NET
// MD5 of specified string plus two leading salt characters
// Used in Serv-U's "MD5" hashes
// Provided to the public domain by Rhino Software, Inc.
(http://www.RhinoSoft.com)
//
```

// INPUT: \$strPwdOrig (a string containing a plaintext password)



```
// OUTPUT: $strDBValue (a string containing the value to insert or check in
the database)
// This is the password to "one way encrypt"
String strPwdOrig = "TestPassword"; // MAKE THIS VALUE DYNAMIC IN
PRODUCTION
Console.WriteLine("Original Password: " + strPwdOrig); // REMOVE THIS LINE
IN PRODUCTION
//
// This is the set of characters used in the two-character salt (note
hardcoded length)
String strSaltChars =
"0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopgrstuvwxyz";
// Generate and display the salt
Random rand = new Random();
String strSalt = "";
strSalt = strSaltChars.Substring(rand.Next(62), 1) +
strSaltChars.Substring(rand.Next(62), 1);
strSalt = "cb"; // UNCOMMENT THIS TO TEST EXAMPLE IN SERV-U MANUAL
Console.WriteLine("Salt:"+strSalt); // REMOVE THIS LINE IN PRODUCTION
//
System.Security.Cryptography.MD5CryptoServiceProvider x = new
System.Security.Cryptography.MD5CryptoServiceProvider();
byte[] bs = System.Text.Encoding.UTF8.GetBytes(strSalt + strPwdOrig);
bs = x.ComputeHash(bs);
System.Text.StringBuilder sbTemp = new System.Text.StringBuilder();
foreach (byte bTemp in bs)
    sbTemp.Append(bTemp.ToString("x2").ToLower());
String strPwdHash = sbTemp.ToString();
Console.WriteLine("Encrypted Password:"+strPwdHash); // REMOVE THIS LINE IN
PRODUCTION
//
String strDBValue = strSalt + strPwdHash;
Console.WriteLine("Value in Database:"+strDBValue); // REMOVE THIS LINE IN
PRODUCTION
```

Generating Directory Access Rules

PHP

```
// List of all Serv-U file and directory permissions values
$intServUFileRead = 1;
$intServUFileWrite = 2;
$intServUFileAppend = 4;
$intServUFileDelete = 8;
$intServUFileRename = 16;
$intServUFileExecute = 32;
$intServUFolderList = 256;
```



```
$intServUFolderCreate = 512;

$intServUFolderRemove = 1024;

$intServUFolderRename = 2048;

$intServUSubfolderInherit = 4096;

// To use these, sum them and apply

$intTestReadWriteList = $intServUFileRead + $intServUFileWrite + $intServUFolderList;

echo "Serv-U Permission Value is ".$intTestReadWriteList;
```

VB.NET

List of all Serv-U file and directory permissions values Dim intServUFileRead as Integer = 1 Dim intServUFileWrite as Integer = 2 Dim intServUFileAppend as Integer = 4 Dim intServUFileDelete as Integer = 8 Dim intServUFileRename as Integer = 16Dim intServUFileExecute as Integer = 32Dim intServUFolderList as Integer = 256Dim intServUFolderCreate as Integer = 512Dim intServUFolderRemove as Integer = 1024Dim intServUFolderRename as Integer = 2048Dim intServUSubfolderInherit as Integer = 4096

'To use these, sum them and apply

Dim intTestReadWriteList as Integer = intServUFileRead + intServUFileWrite + intServUFolderList Response.Write("Serv-U Permission Value is "+intTestReadWriteList.ToString())

C#.NET

```
// List of all Serv-U file and directory permissions values
int intServUFileRead
                          = 1;
int intServUFileWrite
                         = 2;
int intServUFileAppend
                           = 4;
int intServUFileDelete
                          = 8:
int intServUFileRename
                            = 16:
int intServUFileExecute
                          = 32:
int intServUFolderList
                         = 256:
int intServUFolderCreate
                           = 512:
int intServUFolderRemove
                             = 1024:
int intServUFolderRename
                             = 2048:
int intServUSubfolderInherit = 4096;
// To use these, sum them and apply
int intTestReadWriteList = intServUFileRead + intServUFileWrite + intServUFolderList;
Console.WriteLine("Serv-U Permission Value is "+intTestReadWriteList);
```

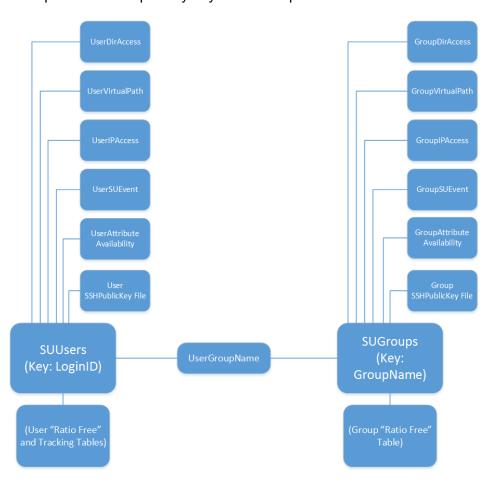


Schema Reference

Programmers and integrators can use this schema to manage Serv-U users and groups, including their related folder permissions, virtual folders, IP access, events, and other attributes.

Schema Diagram

The two core tables are "SUUsers" and "SUGroups". The two are tied together in an "N:N" relationship via the "UserGroupName" table. (I.e., each group may have multiple users as members and each user may below to multiple groups.) "LoginID" is the primary key of SUUsers and "GroupName" is the primary key of SUGroups" – values in these fields should be unique.



SUUsers - User Information Table

Every user has a single SUUser record.

Every user has a single sooser record.			
Field Name	Data Type	Default	Use
			Name of the table containing Serv-
TableName	VARCHAR(32)	SUUsers	U user accounts.
Logging_FileLogging_SystemMessa			Whether the logging of system
ges	VARCHAR(2)	NULL	messages is enabled or not.
Logging_FileLogging_SecurityMess			Whether the logging of security
ages	VARCHAR(2)	NULL	messages is enabled or not.



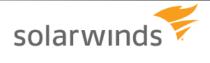
Logging_FileLogging_IPNames Logging_FileLogging_ODBCCalls Logging_FileLogging_ODBCCalls Logging_FileLogging_ODBCErrors Logging_FileLogging_ODBCErrors Logging_FileLogging_TriggeredEve nts VARCHAR(2) VARCHAR(2) VARCHAR(2) NULL Whether the logging of ODBC calls is enabled or not. Whether the logging of ODBC errors is enabled or not. Whether the logging of triggered events is enabled or not. Whether the logging of debug information enabled or not. Whether the logging of debug information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of information is enabled or not.
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Logging_FileLogging_ODBCCalls VARCHAR(2) VARCHAR(3) VARCHAR(4) VARCHAR(5) VARCHAR(6) VARCHAR(6) VARCHAR(7) VARCHAR(8) VARCHAR(8)
Logging_FileLogging_ODBCErrors
Logging_FileLogging_ODBCErrors
Logging_FileLogging_Debug Logging_FileLogging_Debug VARCHAR(2) VARCHAR(3) VARCHAR(4) VARCHAR(5) VARCHAR(6) VARCHAR(6) VARCHAR(7) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(9) VARCHAR(9) VARCHAR(9) VARCHAR(1) VARCHAR(1) VARCHAR(1) VARCHAR(1) VARCHAR(2) VARCHAR(2) VARCHAR(1) VARCHAR(2) VARCHAR(2) VARCHAR(3) VARCHAR(4) VARCHAR(5) VARCHAR(6) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(8) VARCHAR(9) VARCHAR(9) VARCHAR(9) VARCHAR(1)
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Logging_FileLogging_Debug VARCHAR(2) NULL information enabled or not. Whether the logging of socket information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not.
Logging_FileLogging_Socket VARCHAR(2) NULL Whether the logging of socket information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not.
Logging_FileLogging_Socket VARCHAR(2) NULL information is enabled or not. Whether the logging of download information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of upload information is enabled or not. Whether the logging of ile deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not. Whether the logging of file deletes is enabled or not.
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Logging_FileLogging_Uploads
Logging_FileLogging_FileDeletes
Logging_FileLogging_FileDeletes
Logging_FileLogging_FileDirRenam Whether the logging of file directory renames is enabled or
Logging_FileLogging_FileDirRenam directory renames is enabled or
VAROLARIZE INOLL INOL
Whether the logging of directory
Logging_FileLogging_DirCreates
Whether the logging of directory
Logging_FileLogging_DirDeletes
Logging_FileLogging_FTPComman Whether the logging of FTP
ds VARCHAR(2) NULL commands is enabled or not.
Whether the logging of FTP replies
Logging_FileLogging_FTPReplies VARCHAR(2) NULL is enabled or not.
Logging_FileLogging_SSHComman Whether the logging of SSH
ds VARCHAR(2) NULL commands is enabled or not.
Whether the logging of SSH replie
Logging_FileLogging_SSHReplies VARCHAR(2) NULL is enabled or not.
Whether the logging of SSH
Logging_FileLogging_SSHDetailed detailed commands is enabled or
Commands VARCHAR(2) NULL not.
Logging_FileLogging_SSHDetailed Whether the logging of SSH
Replies VARCHAR(2) NULL detailed replies is enabled or not.
Logging_FileLogging_HTTPComma Whether the logging of HTTP
nds VARCHAR(2) NULL commands is enabled or not.
Whether the logging of HTTP
Logging_FileLogging_HTTPReplies VARCHAR(2) NULL replies is enabled or not.
The path to the location where the
Logging_LogFilePath VARCHAR(255) NULL log file is stored.
Whether logging to file is enabled
Logging_LogToFile VARCHAR(2) NULL or not.
Whether archiving the logs in
Logging_LogFileArchiveMode VARCHAR(32) NULL enabled or not.
Logging_MaxLogFilesBytes VARCHAR(32) NULL The maximum size of the log file.
Logging_MaxLogFiles VARCHAR(32) NULL The maximum number of log files.
Number of bytes uploaded by user
FileTransferStats_BytesUploaded VARCHAR(32) NULL for use with Ratios & Quotas.



	1	<u> </u>	[
FileTransferState Butes Downloaded	\/ADCHAD(22)	NULL	Number of bytes downloaded by
FileTransferStats_BytesDownloaded	VARCHAR(32)	NULL	user, for use with Ratios & Quotas. Number of files uploaded by user,
FileTransferStats_FilesUploaded	VARCHAR(32)	NULL	for use with Ratios & Quotas.
The Transferotats_Filesopioaded	VAICOTIAIC(32)	NOLL	Number of files downloaded by
FileTransferStats_FilesDownloaded	VARCHAR(32)	NULL	user, for use with Ratios & Quotas.
			Start time of statistical tracking of
StatisticsStartTime	VARCHAR(32)	NULL	user, expressed as a time_t value.
	, ,		Last time the user logged in to
LastLoginTime	VARCHAR(32)	NULL	Serv-U.
			Last time the user logged out of
LastLogoutTime	VARCHAR(32)	NULL	Serv-U.
Lasina	\/A D O L I A D (00)		Total number of times account was
Logins	VARCHAR(32)	NULL	used to log in. Total number of times account was
Logouts	VARCHAR(32)	NULL	used to log out.
Logodis	VAICOTAIN(32)	NOLL	Maximum number of concurrent
MostConcurrentLogins	VARCHAR(32)	NULL	sessions recorded for account.
g			Total number of seconds account
TotalLoginDurationSecs	VARCHAR(32)	NULL	has been logged in.
	, ,		Total number of seconds of longest
LongestLoginDurationSecs	VARCHAR(32)	NULL	session for account.
			Total number of seconds of
ShortestLoginDurationSecs	VARCHAR(32)	NULL	shortest session for account.
RtServerStartTime	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtFilesUploadRateTotal	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtFilesDownloadRateTotal	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtDailyCount	VARCHAR(255)	NULL	Internal Serv-U statistics tracking.
RtPreviousCount	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtPreviousSeconds	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtPreviousMaxSeconds	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
RtPreviousMaxConcurrent	VARCHAR(32)	NULL	Internal Serv-U statistics tracking.
		Acct	
LoginID	VARCHAR(255)	Username	Username of account.
			Date of last password change for
December 40th and and 40th	\/A D O L I A D (00)	4: 4()	account, expressed as time_t
PasswordChangedOn	VARCHAR(32)	time_t()	value.
			Password encryption level. 0 for unencrypted, 1 for one-way
			encryption, 2 for two-way
PasswordEncryptMode	VARCHAR(32)	NULL	encryption.
71	(- /		Whether password is UTF-8
			encoded or not. 0 for not encoded,
PasswordUTF8	VARCHAR(32)	NULL	1 or NULL for encoded
SKeylter	VARCHAR(32)	NULL	Internal Serv-U SKEY iterator.
SKeySeed	VARCHAR(255)	NULL	Internal Serv-U SKEY seed.
			Whether password change is
D	\/ADOLIAD(0)		required at next login. 0 or NULL
RequirePasswordChange	VARCHAR(2)	NULL	for not required, 1 for required.



	T	1	The state of the s
			Whether event for stale password
			has been fired. 0 or NULL for not
PasswordStaleEventFired	VARCHAR(2)	NULL	fired, 1 for fired.
			Whether account pre-disable event
			has been fired. 0 or NULL for not
PreDisableEventFired	VARCHAR(2)	NULL	fired, 1 for fired.
			Whether account pre-delete event
			has been fired. 0 or NULL for not
PreDeleteEventFired	VARCHAR(2)	NULL	fired, 1 for fired.
1 TODOICECE VOILE ITEG	V/11(011/11(2)	ITOLL	Set to the Organization, or
			"Collection", the user belongs to,
Organization	VADCHAD(SEE)	NII II I	
Organization	VARCHAR(255)	NULL	for GUI sorting.
	\	Acct	By default, encrypt passwords per
Password	VARCHAR(255)	Password	<u>KB1177</u> .
			Set to the full name of the user
FullName	VARCHAR(255)	NULL	owning the account.
			Set to description of the user
Description	VARCHAR(255)	NULL	account.
·	` /		Set to the contact email address
EmailAddress	VARCHAR(255)	NULL	for account.
			Whether user is set to
			automatically disable or delete at a
			future date. 0 for permanent
			account, 1 for automatically
T) (A D O L LA D (00)	.	disable, 2 for automatically delete
Type	VARCHAR(32)	NULL	account in the future.
			Time for the user account to
ExpiresOn	VARCHAR(32)	NULL	expire, expressed as time_t value.
			Whether user-disabled event has
			been fired. 0 or NULL for not fired,
DisabledEventFired	VARCHAR(2)	NULL	1 for fired.
			Number of bytes used by account
QuotaBytes	VARCHAR(32)	NULL	when quotas in place.
,	- (- /	_	The maximum number of files that
AdHocMaxNumOfFilesInRequested			can be requested in a single file
Share	VARCHAR(32)	NULL	share request.
Share	VAIXOTIAIX(32)	NOLL	
AdHaaMayNumOfFilaalaCaatOlaasa	VADCHAD(00)	NII II I	The maximum number of files that
AdHocMaxNumOfFilesInSentShare	VARCHAR(32)	NULL	can be sent in a single file share.
			Administrative privileges for user, if
			applicable. 0 for no privilege, 1 for
			Domain Administrator, 2 for Server
			Administrator, 3 for Read-Only
			Domain Administrator, 4 for Read-
			Only System Administrator, 5 for
			Group Administrator, 6 for Read-
AdminType	VARCHAR(32)	NULL	Only Group Administrator.
· ·	` /		
			Specifies whether users can edit
Allaw Cuatama Camta attata	\/ADCHAD(0)	NII II I	their contact information in the file
AllowCustomContactInfo	VARCHAR(2)	NULL	share wizards.
			Whether the usage of FTP
AllowFTPVoyagerJV	VARCHAR(2)	NULL	Voyager JV is enabled.
·			, - go. o o



			1
			Whether the usage of File Sharing
AllowFileSharing	VARCHAR(2)	NULL	is enabled.
- morn moonaring	771110117111(2)	11022	Whether to allow changes of IP
			address during HTTP sessions.
			Required for mobile access. 0 for
AllowHTTPIPAddressChange	VARCHAR(2)	NULL	disabled, 1 or NULL for enabled.
			Whether to allow media playback
AllowUTTDModioDlovbook	\/A D C H A D (2)	NULL	on HTTP sessions. 0 for disabled, 1 or NULL for enabled.
AllowHTTPMediaPlayback	VARCHAR(2)	NULL	Whether to allow user to delete
			files during rename operations
			where the target file name exists. 0
			to disable rename overwrite, 1 or
AllowRenameOverwrite	VARCHAR(2)	NULL	NULL to enable overwrite.
	= =		Whether users can specify to allow
AllowUserDefinedGuestAccess	VARCHAR(2)	NULL	guests to access a file share.
	\(\langle \cdot \c		Whether the usage of the Web
AllowWebClient	VARCHAR(2)	NULL	Client is enabled.
			Whether to allow Web Client Pro for Serv-U MFT Server users. 0 for
AllowWebClientPro	VARCHAR(2)	NULL	disabled, 1 or NULL for enabled.
7 MOWY COOLIGINATE	7711(011)(11(2)	ITOLL	Whether to allow user to log in
			regardless of security and IP
			Access requirements. 0 or NULL
AlwaysAllowLogin	VARCHAR(2)	NULL	for disabled, 1 for enabled.
			Whether to block anti-timeout
			operations like NOOP during sessions, to prevent sessions from
			being marked as idle. 0 or NULL
			for allow anti-timeout, 1 for do not
BlockAntiTimeout	VARCHAR(2)	NULL	allow anti-timeout.
			Whether to check directory sizes
			during upload for possible directory
CheckDirSizePeriodically	VARCHAR(2)	NULL	size violations. 0 or NULL for disabled, 1 for enabled.
Checkbirolzer chodically	VAROTIAN(2)	INOLL	Whether to convert URL-encoded
			characters like %23 into their
			ASCII equivalents during transfers.
	= =		0 to not encode, 1 or NULL to
ConvertURLChars	VARCHAR(2)	NULL	encode.
			Whether to delete files only
			partially uploaded by user. 0 or NULL for do not delete, 1 for
DeletePartiallyUploaded	VARCHAR(2)	NULL	delete.
DirMessage	VARCHAR(255)	NULL	
•			Whether the usage of password
DisablePasswordGenerators	VARCHAR(2)	NULL	generators is allowed or not.
EmailAddressSet	VARCHAR(2)	NULL	Email address for user account.
			Whether account is allowed to
EnableDasswordDassword	\/\BCH\B(0)	NII II I	recover password. 0 or NULL for
EnablePasswordRecovery	VARCHAR(2)	NULL	disabled, 1 for enabled.



	<u> </u>	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			Whether account is enabled for
) (A D O) (A D (O)		login access. 0 for disabled, 1 for
Enabled	VARCHAR(2)	1	enabled.
			Whether to enable FTP/FTPS for
	= = =		user. 0 for disabled, 1 or NULL for
FTP	VARCHAR(2)	NULL	enabled.
			Linux group owner for uploaded
FileGroup	VARCHAR(255)	NULL	files, applies to Linux only.
			Linux user owner for uploaded
FileOwner	VARCHAR(255)	NULL	files, applies to Linux only.
			Whether to enable HTTP/HTTPS
			for login access. 0 for disabled, 1
HTTP	VARCHAR(2)	NULL	or NULL for enabled.
			Whether to hide the "Compressed"
			fact from file listings. 0 or NULL to
			show compression fact, 1 to hide
HideCompressedState	VARCHAR(2)	NULL	compression fact.
			Whether to hide the "Encrypted"
		1	fact from file listings. 0 or NULL to
			show encryption fact, 1 to hide
HideEncryptedState	VARCHAR(2)	NULL	encryption fact.
			Whether to hide "Hidden" files and
			folders from Directory Listings. 0 or
			NULL to show hidden files/folders,
HideHidden	VARCHAR(2)	NULL	1 to hide hidden files/folders.
			Whether to obfuscate passwords in
			Serv-U logs. 0 to show passwords
			in clear text, 1 or NULL to hide
HidePasswordInLog	VARCHAR(2)	NULL	passwords.
			Home directory for the user
			account, as either a Windows local
			volume path or a UNC path. May
Lista Bis	\/A D () A D (055)		require escape characters
HomeDir	VARCHAR(255)	NULL	depending on database engine.
			How many seconds a session may
			perform no actions before it is
		1	considered idle. Interacts with
			BlockAntiTimeout limit to determine
IdloTimoCocondo	//A D C LL A D (20)	NII II I	whether clients may keep sessions
IdleTimeSeconds	VARCHAR(32)	NULL	alive.
			Whether to include response codes
		1	in every line of multi-line message
Include Resp Codes In Mag Files	\\\\ D C H \\ D \(2\)	NII II I	responses in FTP. 0 or NULL to
IncludeRespCodesInMsgFiles	VARCHAR(2)	NULL	not include, 1 to include.
		1	Whether the password to the file share is inserted in the email
Incort Password In Empillaryita	//ADCHAD(22)	NII II I	invitation to the share.
InsertPasswordInEmailInvite	VARCHAR(32)	NULL	
			Whether to interpret LF (Line Feed)
			as an End Of Line (EOL) character in text files. Useful for interaction
		1	with some mainframe systems. 0
			or NULL to not interpret LF as
Interpret FacEO	VARCHAR(2)	NULL	
InterpretLFasEOL	VANCHAR(2)	INULL	EOL, 1 to interpret LF as EOL.



		Т	T
LockInHomeDir	VARCHAR(2)	1	Whether to lock a user in their Home Directory, hiding full drive paths from user. 0 for show full path, 1 or NULL to lock user in Home Directory.
LowerCaseFileNames	VARCHAR(2)	NULL	Whether to force all listings to lower case, required by some mainframe clients. 0 or NULL for use true case, 1 to force lowercase listings.
MaintainHTTPUploadTimes	VARCHAR(2)	NULL	Whether to set modification-time of files uploaded by HTTP to the modification-time of the source file. 0 to abandon original time, 1 or NULL to maintain times.
MaxGuestUploadFileSize	VARCHAR(32)	NULL	The maximum size of a single file a guest user can upload.
MaxSessionDownloadRate	VARCHAR(32)	NULL	Maximum download speed for sessions initiated by user account.
MaxSessionUploadRate	VARCHAR(32)	NULL	Maximum upload speed for sessions initiated by user account. Maximum sessions from a single
MaxSessionsIPPerUser	VARCHAR(32)	NULL	IP address utilizing the account. Maximum sessions from a single IP address utilizing the account.
MaxSessionsPerUser	VARCHAR(32)	NULL	account, total. Maximum size of an individual file
MaxUploadFileSize	VARCHAR(32)	NULL	upload, in bytes. Maximum download speed for
MaxUserDownloadRate	VARCHAR(32)	NULL	user, total. Maximum upload speed for user,
MaxUserUploadRate	VARCHAR(32)	NULL	total. Minimum password length
MinPasswordLen	VARCHAR(32)	NULL	permitted for user account. Whether to use natural sorting for
NaturalSort	VARCHAR(2)	NULL	directory listings. 0 for using standard computational listings, 1 or NULL for natural listings.
NotifyAfterGuestDownload	VARCHAR(32)	NULL	Specifies whether a notification is sent after the guest user downloads files from a file share. Specifies whether a notification is
NotifyAfterGuestUpload	VARCHAR(32)	NULL	sent after the guest user uploads files to a file share.
ODBCVersion	VARCHAR(32)	NULL	Tracks upgrades made to the database table structure.
PasswordChange	VARCHAR(2)	NULL	Whether to allow user to change password. 0 or NULL for not permitted, 1 for permitted.
PasswordExpiresDays	VARCHAR(32)	NULL	How many days a password may be saved before expiring.
PasswordRecoveryEmailMessage	VARCHAR(255)	NULL	Contents of email to be sent to users who recover passwords online.



		1	
PasswordRecoveryEmailSubject	VARCHAR(255)	NULL	Subject of email to be sent to users who recover passwords online.
r asswordivecoveryEmailSubject	VAIXOLIAIX(200)	NOLL	How many days a password may
			be saved before being considered
PasswordStaleDays	VARCHAR(32)	NULL	stale and due for change.
,			Specifies the type of password
PasswordType	VARCHAR(32)	NULL	used for FTP connections.
			How many days before triggering
PreDeleteDays	VARCHAR(32)	NULL	account pre-delete event.
			How many days before triggering
PreDisableDays	VARCHAR(32)	NULL	account pre-disable event.
Overte	\(\A\D\C\\\A\D\(22\)	NII II I	Total disk quota space allotted to
Quota	VARCHAR(32)	NULL	user, in bytes. Whether to require secure
			passwords, using upper-lower case
			and at least one digit. 0 or NULL to
RequireComplexPasswords	VARCHAR(2)	NULL	not require, 1 to require.
•	\ /		Whether to require an email
			address for a user account. 0 or
			NULL for not required, or 1 for
RequireEmailAddressSet	VARCHAR(2)	NULL	required.
			Whether guest users are requested
RequirePasswordForGuests	VARCHAR(32)	NULL	to provide a password when accessing a file share.
•	` '	NULL	accessing a file strate.
RequireReverseDNSName	VARCHAR(2)	NULL	Whether to require secure
			connection from user before login.
			Forces incoming connections to be
			routed through FTPS, SFTP, or
			HTTPS or Serv-U will drop
RequireSecure	VARCHAR(2)	NULL	connection before
ResetGroupStatsAfterRestart	VARCHAR(2)	NULL	Currently unused.
			Whether to reset User statistics
			when Serv-U is restarted. 0 or
ResetUserStatsAfterRestart	VARCHAR(2)	NULL	NULL for do not restart, 1 for restart.
ResetOserStatsAfterRestart	VARCHAR(2)	NOLL	Specifies the restriction on the
			number of days guest users can
RestrictGuestAccessDays	VARCHAR(32)	NULL	access a file share.
,	` '		Allows users who have access to
			whole system "/" to list out drives. 0
RootIsDrives	VARCHAR(2)	NULL	or NULL to restrict, 1 to allow.
			Maximum version of SFTP enabled
SETDMov\/oroion)/A D C H A D (20)	NULL	for user account. Valid values are
SFTPMaxVersion SMTDA security lamb	VARCHAR(32)		4, 5, 6.
SMTPAccountName	VARCHAR(255)	NULL	Currently unused.
SMTPFromAddress	VARCHAR(255)	NULL	Currently unused.
SMTPFromName	VARCHAR(255)	NULL	Currently unused.
SMTPPassword	VARCHAR(255)	NULL	Currently unused.
SMTPRequiresLogin	VARCHAR(2)	NULL	Currently unused.
SMTPSSL	VARCHAR(2)	NULL	Currently unused.
SMTPServer	VARCHAR(255)	NULL	Currently unused.



SMTPServerPort	VARCHAR(32)	NULL	Currently unused.
SMTPUseSSLCertificate	VARCHAR(2)	NULL	Currently unused.
SSH	VARCHAR(2)	NULL	Whether to enable SFTP for user. 0 for disabled, 1 or NULL for enabled.
SSHAuthType	VARCHAR(32)	NULL	Authentication type to be used to for SSH/SFTP connections. 0 for both public key and password, 1 for public key or password, 2 for public key only, 3 for password only.
SendAccessLinkToRecipients	VARCHAR(32)	NULL	Specifies whether the file sharing link is sent to the recipient of the file share.
SendAccessLinkToSender	VARCHAR(32)	NULL	Specifies whether the file sharing link is sent to the creator of the file share.
			Whether to apply Server/Domain Directory Access rules before user/group level rules, used when global rules are used to ban file attachments or file types. 0 or NULL for apply user-level rules first, 1 for apply Domain/Server
ServerDomainDirAccessFirst	VARCHAR(2)	NULL	rules first. Number of seconds before individual session is considered
SessTimeoutSeconds	VARCHAR(32)	NULL	idle.
SignOnMessage	VARCHAR(255)	NULL	Text message to be displayed upon user login.
SignOnMessageFilePath	VARCHAR(255)	NULL	Path to text file to be displayed for user login.
SupportLink	VARCHAR(255)	NULL	Currently unused.
TimeoutBlockIPSeconds	VARCHAR(32)	NULL	Specify number of seconds to lock user out after session timeout.
TreatWindowsShortCutsAsTarget	VARCHAR(2)	NULL	When enabled, treats Windows shortcuts as their targets in listings. 0 for disabled, 1 for enabled.
WebClientStartupMode	VARCHAR(32)	NULL	What client to start for HTTP/HTTPS sessions. 0 to prompt the user, 1 for Web Client, 2 for FTP Voyager JV.
WindowsShortCutsAsLinks	VARCHAR(2)	NULL	When enabled, treats Windows shortcuts as links. 0 or NULL for disabled, 1 for enabled.
AdHocAllowedOutgoingSource	VARCHAR(32)	NULL	Specifies the directory that can be used as the source of outgoing file shares.

<u>UserGroupName - User Groups Table</u>
Each entry in this "N:N" table maps a single user to a single group (using the group name), and vice versa.



Field Name	Data Type	Default	Use
		UserGroupNa	The name of the table containing membership
TableName	VARCHAR(32)	me	information for Serv-U Groups.
		NULL	The name of the LoginID (user account) to which
LoginID	VARCHAR(255)	NOLL	the group membership applies.
			The order of the group membership in the list for the
SortIndex	INT	NULL	user account.
			The name of the group to which membership is
GroupName	VARCHAR(255)	NULL	specified.

<u>UserDirAccess – User Directory Access Table</u>

These entries map permissions to directories using a path name.

Field Name	Data Type	Default	Use
			The name of the table containing membership
TableName	VARCHAR(32)	UserDirAccess	information for Serv-U Groups.
LoginID	VARCHAR(255)	NULL	The name of the account to whom the rule applies.
SortIndex	INT	NULL	The order of the rule in the user account's list of Directory Access rules.
Dir	VARCHAR(255)	NULL	The path or file path to which the rule applies.
			The permissions to the directory, in HEX XOR
Access	VARCHAR(32)	NULL	format, see KB1776.
MaxSize	VARCHAR(32)	NULL	The maximum directory size for the directory (optional).
NTUser	VARCHAR(255)	NULL	Windows only - for setting a user account for permissions to a specific directory.
NTPassword	VARCHAR(255)	NULL	Windows only - for setting a user password for permissions to a specific directory.
NTDomain	VARCHAR(255)	NULL	Windows only - for setting a domain for permissions to a specific directory.

UserVirtualPath - User Virtual Path Table

These entries each define a single virtual path for a single user.

Field Name	Data Type	Default	Use
			Name of the table containing Virtual Paths for
TableName	VARCHAR(32)	UserVirtualPath	users.
			The name of the account to whom the Virtual
LoginID	VARCHAR(255)	NULL	Path applies.
PhysicalPath	VARCHAR(255)	NULL	The physical path to be mapped.
			The virtual path (typically in %HOME%\folder
VirtualPath	VARCHAR(255)	NULL	format).
			Whether to include the Virtual Path in "Maximum
			directory size" calculations. 0 or NULL to disable,
IncludeInMaxSize	VARCHAR(2)	NULL	1 to enable.

<u>UserIPAccess - User IP Access Table</u>

These entries each define an IP access rules for a single user.

Field Name	Data Type	Default	Use
			Name of the table containing IP Access rules for
TableName	VARCHAR(32)	UserIPAccess	users.
LoginID	VARCHAR(255)	NULL	The name of the account to whom the IP Access rule



			applies.
SortIndex	INT	NULL	The order of the IP Access rule for the user account.
IP	VARCHAR(255)	NULL	The IP Address or range to be permitted or denied. IPv4, IPv6, wildcards, and CIDR blocks permitted.
Description	VARCHAR(255)	NULL	Text description of the rule.
Allow	VARCHAR(2)	NULL	Whether to allow or deny the IP address or range. 0 for deny, 1 for allow.

<u> UserSUEvent - User Event Table</u>

These entries each define an event for a single user.

Field Name	Data Type	Default	Use
TableName	VARCHAR(32)	UserSUEvent	Name of the table containing Events for users.
			The name of the account to whom the Event
LoginID	VARCHAR(255)	NULL	applies.
			Whether the Event is enabled. 1 for enabled, 0
Enabled	VARCHAR(2)	NULL	for disabled.
EventID	VARCHAR(32)	NULL	The internal Serv-U ID of the event.
EventName	VARCHAR(255)	NULL	The name of the event.
Description	VARCHAR(255)	NULL	The description of the event.
			The type of action to be taken. NULL for email,
Action	VARCHAR(32)	NULL	1 for balloon tip, 2 for execute command.
			For emails, the subject of the email. For balloon
Data1	VARCHAR(255)	NULL	tips, the subject of the balloon tip.
			For emails, the body of the email. For balloon
Data2	VARCHAR(255)	NULL	tips, the text in the balloon tip.
EmailToAddress	VARCHAR(255)	NULL	For emails, the recipients of the email.
EmailToAddressBCC	VARCHAR(255)	NULL	For emails, the BCC recipients of the email.
			For execute command events, the path to the
ExeFilePath	VARCHAR(255)	NULL	EXE or binary file to execute.
			For execute command events, the number of
			seconds to wait after event trigger to run
ExecWaitSecs	VARCHAR(32)	NULL	command.

<u>UserSSHPublicKeyFile – User SSH Public Key Table</u>

Field Name	Data Type	Default	Use
TableName	VARCHAR(32)	GroupSSHPu blicKeyFile	Name of the table containing SSH public key information for groups.
LoginID	VARCHAR(255)	NULL	Foreign key to the SUUsers table.
SSHPublicKeyName	VARCHAR(255)	NULL	Cosmetic name for the SSH public key (e.g. John's Work Notebook)
SSHPublicKeyPath	VARCHAR(255)	NULL	Path to the public key file to be used for the user account in SSH authentication.

User Ratio Configuration and Tracking Tables

These tables all control or store an element of Serv-U's upload/download transfer ratios.

<u>UserUIDIRatioFreeFile - User Ratio-Free Files Table</u>

Field Name	Data Type	Default	Use
TableName	VARCHAR(32)	UserUIDIRatioFreeFile	Name of the table containing Ratio-free files for



			users.
			The name of the account to whom the ratio-free
LoginID	VARCHAR(255)	NULL	file mask applies.
			The path or file name of the file or file type
			against which upload and download ratios will
Mask	VARCHAR(255)	NULL	not be applied.

UserFilesUIDIRatio - Per User File Ratio Table

Field Name	Data Type	Default	Use
			Name of the table containing Ratio file credits
TableName	VARCHAR(32)	UserFilesUIDIRatio	for users, which apply across sessions.
			The name of the account to whom the Ratio
LoginID	VARCHAR(255)	NULL	credit applies.
			The amount of file credit applied for file
			uploads, relative to the number of files
UploadValue	VARCHAR(32)	NULL	uploaded.
			The amount of file credit deducted for file
			downloads, relative to the number of files
DownloadValue	VARCHAR(32)	NULL	downloaded.
			The total amount of transfer credit available to
Credit	VARCHAR(32)	NULL	the user account, in files, regardless of file size.

UserBytesUIDIRatio - Per User Byte Ratio Table

	CONDITION OF THE PARTY TABLE			
Field Name	Data Type	Default	Use	
			Name of the table containing Ratio byte credits	
TableName	VARCHAR(32)	UserBytesUIDIRatio	for users, which apply across sessions.	
			The name of the account to whom the Ratio	
LoginID	VARCHAR(255)	NULL	credit applies.	
			The amount of file credit applied for file	
			uploads, relative to the number of bytes	
UploadValue	VARCHAR(32)	NULL	uploaded.	
			The amount of file credit deducted for file	
			downloads, relative to the number of bytes	
DownloadValue	VARCHAR(32)	NULL	downloaded.	
			The total amount of transfer credit available to	
			the user account, in bytes, regardless of the	
Credit	VARCHAR(32)	NULL	number of files.	

<u>UserSessionFilesUIDIRatio - Per Session Files Ratio Table</u>

000100010	Osci Ocsioni nesolditatio i ci Ocsioni i nesi tatio i abie			
Field Name	Data Type	Default	Use	
			Name of the table containing Ratio file credits for users, which do not apply	
TableName	VARCHAR(32)	UserSessionFilesUIDIRatio	across sessions.	
			The name of the account to whom the	
LoginID	VARCHAR(255)	NULL	Ratio credit applies.	
			The amount of file credit applied for file	
UploadValue	VARCHAR(32)	NULL	uploads, relative to the number of files uploaded.	
			The amount of file credit deducted for	
			file downloads, relative to the number	
DownloadValue	VARCHAR(32)	NULL	of files downloaded.	



			The total amount of transfer credit available to the user account, in files,
Credit	VARCHAR(32)	NULL	regardless of file size.

UserSessionBytesUIDIRatio - Per Session Bytes Ratio Table

Field Name	Data Type	Default	Use
			Name of the table containing Ratio
		_	byte credits for users, which do not
TableName	VARCHAR(32)	UserSessionBytesUIDIRatio	apply across sessions.
			The name of the account to whom the
LoginID	VARCHAR(255)	NULL	Ratio credit applies.
			The amount of file credit applied for file
			uploads, relative to the number of
UploadValue	VARCHAR(32)	NULL	bytes uploaded.
			The amount of file credit deducted for
			file downloads, relative to the number
DownloadValue	VARCHAR(32)	NULL	of bytes downloaded.
			The total amount of transfer credit
			available to the user account, in bytes,
Credit	VARCHAR(32)	NULL	regardless of the number of files.

<u>UserAttributeAvailability - User Attribute Table</u> This table is used to hold other user-specific attributes.

Field Name	Data Type	Default	Use
			The name of the table containing User-
TableName	VARCHAR(32)	UserAttributeAvailability	level attribute availability.
			The name of the account to whom the
LoginID	VARCHAR(255)	NULL	attribute availability limit applies.
			The attribute ID of the attribute that will
			be limited. The attribute ID is equal to
Attribute	VARCHAR(32)	NULL	the text name of the attribute in Serv-U.
			Whether to restrict the limit to certain
			hours of the day. 0 or NULL for do not
LimitToTimeOfDay	VARCHAR(32)	NULL	limit, 1 to limit.
			Start time of the day to begin
			restrictions, in milliseconds from the
StartTime	VARCHAR(32)	NULL	start of the day.
			End time of day to end restrictions, in
EndTime	VARCHAR(32)	NULL	seconds from start of the day.
			1 to enable limit on this day of week, 0
Sunday	VARCHAR(32)	NULL	to disable limit on this day of week.
			1 to enable limit on this day of week, 0
Monday	VARCHAR(32)	NULL	to disable limit on this day of week.
			1 to enable limit on this day of week, 0
Tuesday	VARCHAR(32)	NULL	to disable limit on this day of week.
			1 to enable limit on this day of week, 0
Wednesday	VARCHAR(32)	NULL	to disable limit on this day of week.
			1 to enable limit on this day of week, 0
Thursday	VARCHAR(32)	NULL	to disable limit on this day of week.
			1 to enable limit on this day of week, 0
Friday	VARCHAR(32)	NULL	to disable limit on this day of week.



			1 to enable limit on this day of week, 0
Saturday	VARCHAR(32)	NULL	to disable limit on this day of week.

<u>SUGroups – Group Info Table</u> This is the central groups table – one main entry for each group.

Field Name	Data Type	Default	Use
	,,,	SUGrou	Name of the table containing
TableName	VARCHAR(32)	ps	Serv-U groups.
			Whether the logging of system
Logging_FileLogging_SystemMessages	VARCHAR(2)	NULL	messages is enabled or not.
) (A D O) (A D (O)		Whether the logging of security
Logging_FileLogging_SecurityMessages	VARCHAR(2)	NULL	messages is enabled or not.
Logging_FileLogging_IPNames	VARCHAR(2)	NULL	Whether the logging of IP names is enabled or not.
Logging_i lieLogging_ii Names	VAROTIAR(2)	INOLL	Whether the logging of ODBC
Logging_FileLogging_ODBCCalls	VARCHAR(2)	NULL	calls is enabled or not.
33 5 33 5 3 5 5 3 5 5 3 5 5 3 5 5 3 5 5 3 5 5 3 5 5 3			Whether the logging of ODBC
Logging_FileLogging_ODBCErrors	VARCHAR(2)	NULL	errors is enabled or not.
			Whether the logging of
) (A D O) (A D (O)		triggered events is enabled or
Logging_FileLogging_TriggeredEvents	VARCHAR(2)	NULL	not.
Logging_FileLogging_Debug	VARCHAR(2)	NULL	Whether the logging of debug information enabled or not.
Logging_FileLogging_Debug	VARCHAR(2)	INOLL	Whether the logging of socket
Logging_FileLogging_Socket	VARCHAR(2)	NULL	information is enabled or not.
	77.11(31.17.11(12)	11022	Whether the logging of
			download information is
Logging_FileLogging_Downloads	VARCHAR(2)	NULL	enabled or not.
			Whether the logging of upload
Logging_FileLogging_Uploads	VARCHAR(2)	NULL	information is enabled or not.
Logging FileLogging FileDeletes	\/ADCHAD(2)	NII II I	Whether the logging of file
Logging_FileLogging_FileDeletes	VARCHAR(2)	NULL	deletes is enabled or not. Whether the logging of file
			directory renames is enabled
Logging_FileLogging_FileDirRenames	VARCHAR(2)	NULL	or not.
			Whether the logging of
			directory creations is enabled
Logging_FileLogging_DirCreates	VARCHAR(2)	NULL	or not.
			Whether the logging of
Lagring Filel againg DivDeletes	\/ADCHAD(0)	NII II I	directory deletions is enabled
Logging_FileLogging_DirDeletes	VARCHAR(2)	NULL	or not.
Logging_FileLogging_FTPCommands	VARCHAR(2)	NULL	Whether the logging of FTP commands is enabled or not.
Logging_i iloLogging_i ii oommands	VAIXOLIAIX(2)	INOLL	Whether the logging of FTP
Logging_FileLogging_FTPReplies	VARCHAR(2)	NULL	replies is enabled or not.
	, ,		Whether the logging of SSH
Logging_FileLogging_SSHCommands	VARCHAR(2)	NULL	commands is enabled or not.
			Whether the logging of SSH
Logging_FileLogging_SSHReplies	VARCHAR(2)	NULL	replies is enabled or not.
Landing File Landing COURTS (1715)			Whether the logging of SSH
Logging_FileLogging_SSHDetailedComm	\/ABCHAB(2)	NII II I	detailed commands is enabled
ands	VARCHAR(2)	NULL	or not.



	<u> </u>		
Lancian Filel ancian COURTS to the ARABia			Whether the logging of SSH
Logging_FileLogging_SSHDetailedReplie	\/A D C L I A D (2)	NULL	detailed replies is enabled or
S	VARCHAR(2)	NULL	not.
Logging_FileLogging_HTTPCommands	VARCHAR(2)	NULL	Whether the logging of HTTP commands is enabled or not.
Logging_riieLogging_rri recommands	VARCHAR(2)	NOLL	Whether the logging of HTTP
 Logging_FileLogging_HTTPReplies	VARCHAR(2)	NULL	replies is enabled or not.
Logging_riieLogging_rri rekepiles	VARCHAR(2)	NOLL	The path to the location where
 Logging_LogFilePath	VARCHAR(255)	NULL	the log file is stored.
Logging_Logi lier atti	VAINOLIAIN(200)	NOLL	Whether logging to file is
Logging_LogToFile	VARCHAR(2)	NULL	enabled or not.
Logging_Log101 iic	VAROTIAR(2)	INOLL	Whether archiving the logs in
Logging_LogFileArchiveMode	VARCHAR(32)	NULL	enabled or not.
Logging_Logi ne/tronivelviode	VAROTIAR(02)	INOLL	The maximum size of the log
Logging_MaxLogFilesBytes	VARCHAR(32)	NULL	file.
	774(01)/4(02)	11022	The maximum number of log
Logging_MaxLogFiles	VARCHAR(32)	NULL	files.
	17.11.(02)		Number of bytes uploaded by
			group, for use with Ratios &
FileTransferStats_BytesUploaded	VARCHAR(32)	NULL	Quotas.
= / 1	\		Number of bytes downloaded
			by group, for use with Ratios &
FileTransferStats_BytesDownloaded	VARCHAR(32)	NULL	Quotas.
į.	ì		Number of files uploaded by
			group, for use with Ratios &
FileTransferStats_FilesUploaded	VARCHAR(32)	NULL	Quotas.
			Number of files downloaded by
			group, for use with Ratios &
FileTransferStats_FilesDownloaded	VARCHAR(32)	NULL	Quotas.
			Start time of statistical tracking
			of group, expressed as a
StatisticsStartTime	VARCHAR(32)	NULL	time_t value.
			Last time a user in the group
LastLoginTime	VARCHAR(32)	NULL	logged in to Serv-U.
 .	\		Last time a user in the group
LastLogoutTime	VARCHAR(32)	NULL	logged out of Serv-U.
			Total number of times
Logino	\/ADCHAD(22\	NII II I	members in the group logged
Logins	VARCHAR(32)	NULL	in.
			Total number of times
Logouts	VARCHAR(32)	NULL	members in the group logged out.
Logodis	VAINOLIAN(32)	INOLL	Maximum number of
			concurrent sessions recorded
MostConcurrentLogins	VARCHAR(32)	NULL	for the group.
	7711(01)711(02)	11022	Total number of seconds users
			in the group have been logged
TotalLoginDurationSecs	VARCHAR(32)	NULL	in.
	1		Total number of seconds of
			longest session for a user
LongestLoginDurationSecs	VARCHAR(32)	NULL	within the group.
			Total number of seconds of
ShortestLoginDurationSecs	VARCHAR(32)	NULL	shortest session for a user
	\- /		



		1	1 90 % (0
			within the group.
D.O. 0. 1T	\		Internal Serv-U statistics
RtServerStartTime	VARCHAR(32)	NULL	tracking.
DIETA ALIA AND ACATA CAL	\		Internal Serv-U statistics
RtFilesUploadRateTotal	VARCHAR(32)	NULL	tracking.
DIETA De la	\		Internal Serv-U statistics
RtFilesDownloadRateTotal	VARCHAR(32)	NULL	tracking.
DID 21 October	\/A DOLLA D/055\		Internal Serv-U statistics
RtDailyCount	VARCHAR(255)	NULL	tracking.
D4DiCt) (A D O L I A D (00)	NII II I	Internal Serv-U statistics
RtPreviousCount	VARCHAR(32)	NULL	tracking.
D4Daaria va Cananada) (A D O L I A D (00)	NII II I	Internal Serv-U statistics
RtPreviousSeconds	VARCHAR(32)	NULL	tracking.
DtDrovious May Casanda	\/A D C L I A D (22)	NII II I	Internal Serv-U statistics
RtPreviousMaxSeconds	VARCHAR(32)	NULL	tracking.
RtPreviousMaxConcurrent	\/\BCH\B(22\	NII II I	Internal Serv-U statistics
KIFTEVIOUSIVIAXCONCUITENI	VARCHAR(32)	NULL Group	tracking.
CrounNama	\/ADCHAD(255)	Name	Name of the group.
GroupName	VARCHAR(255)	1	• .
Description	VARCHAR(255)	NULL	Description of the group.
			Whether to apply Group-level
			rules before User-level
			Directory Access rules. 0 or
ApplyDirAccessPulseAboyel lear	\/ABCHAB(3)	NULL	NULL to apply User-level first, 1 to apply Group-level first.
ApplyDirAccessRulesAboveUser	VARCHAR(2)	NULL	The maximum number of files
AdHocMaxNumOfFilesInRequestedShare	VARCHAR(32)	NULL	that can be requested in a single file share request.
Auriociviaxivumorrilesimeequesteusnare	VARCHAR(32)	NOLL	The maximum number of files
			that can be sent in a single file
AdHocMaxNumOfFilesInSentShare	VARCHAR(32)	NULL	share.
Auriociviaxivumorrilesinsentsnare	VARCHAR(32)	NOLL	Administrative privileges for
			user, if applicable. 0 for no
			privilege, 1 for Domain
			Administrator, 2 for Server
			Administrator, 3 for Read-Only
			Domain Administrator, 4 for
			Read-Only System
			Administrator, 5 for Group
			Administrator, 6 for Read-Only
AdminType	VARCHAR(32)	NULL	Group Administrator.
,	, ,		Specifies whether users can
			edit their contact information in
AllowCustomContactInfo	VARCHAR(2)	NULL	the file share wizards.
7 monouscomosmastinio	V/11(0) 1/(1(2)	ITOLL	and the share wizards.
			Market and the second of ETD
Allew FTD / ever see 11/	\/ADOLIAD(0)	NII II 7	Whether the usage of FTP
AllowFTPVoyagerJV	VARCHAR(2)	NULL	Voyager JV is enabled.
			Whether the usage of File
AllowFileSharing	VARCHAR(2)	NULL	Sharing is enabled.



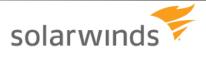
	T-	,	
			Whether to allow changes of IP address during HTTP
			sessions. Required for mobile
			access. 0 for disabled, 1 or
AllowHTTPIPAddressChange	VARCHAR(2)	NULL	NULL for enabled.
			Whether to allow media
			playback on HTTP sessions. 0 for disabled, 1 or NULL for
AllowHTTPMediaPlayback	VARCHAR(2)	NULL	enabled.
			Whether to allow user to delete
			files during rename operations
			where the target file name exists. 0 to disable rename
			overwrite, 1 or NULL to enable
AllowRenameOverwrite	VARCHAR(2)	NULL	overwrite.
			Whether users can specify to
			allow guests to access a file
AllowUserDefinedGuestAccess	VARCHAR(2)	NULL	share.
			Mhathar the usage of the Mah
AllowWebClient	VARCHAR(2)	NULL	Whether the usage of the Web Client is enabled.
7 MONTY OBCINETE	7741(2)	ITOLL	Whether to allow Web Client
			Pro for Serv-U MFT Server
Alle Mari Oliver Des) / A D O L I A D (O)	N 11 11 1	users. 0 for disabled, 1 or
AllowWebClientPro	VARCHAR(2)	NULL	NULL for enabled. Whether to allow user to log in
			regardless of security and IP
			Access requirements. 0 or
			NULL for disabled, 1 for
AlwaysAllowLogin	VARCHAR(2)	NULL	enabled. Whether to block anti-timeout
			operations like NOOP during
			sessions, to prevent sessions
			from being marked as idle. 0 or
BlockAntiTimeout	\/A D C LI A D (2)	NULL	NULL for allow anti-timeout, 1
Biockanii i imeout	VARCHAR(2)	NULL	for do not allow anti-timeout. Whether to check directory
			sizes during upload for
			possible directory size
ChapleDirSiza Daria disally	\/A D C LI A D (2)	NII II I	violations. 0 or NULL for
CheckDirSizePeriodically	VARCHAR(2)	NULL	disabled, 1 for enabled. Whether to convert URL-
			encoded characters like %23
			into their ASCII equivalents
ConvertIDI Chara	\/ADOLIAD(0)	NII II I	during transfers. 0 to not
ConvertURLChars	VARCHAR(2)	NULL	encode, 1 or NULL to encode. Whether to delete files only
			partially uploaded by user. 0 or
			NULL for do not delete, 1 for
DeletePartiallyUploaded	VARCHAR(2)	NULL	delete.
DirMessage	VARCHAR(255)	NULL	
טווועופאאטפ	VAINOTIAN(200)	INULL	



	1	T	T 100 01 01
			Whether the usage of
D'add b Dana and O and a dana	\		password generators is
DisablePasswordGenerators	VARCHAR(2)	NULL	allowed or not.
English Harris Ont	\		Email address for user
EmailAddressSet	VARCHAR(2)	NULL	account.
			Whether account is allowed to
- II D ID	\		recover password. 0 or NULL
EnablePasswordRecovery	VARCHAR(2)	NULL	for disabled, 1 for enabled.
			Whether account is enabled
	\		for login access. 0 for disabled,
Enabled	VARCHAR(2)	1	1 for enabled.
			Whether to enable FTP/FTPS
ETD	\/A D C A D (0)	NII II I	for user. 0 for disabled, 1 or
FTP	VARCHAR(2)	NULL	NULL for enabled.
			Linux group owner for
FileCreum	\/ADCHAD(055)	NII II I	uploaded files, applies to Linux
FileGroup	VARCHAR(255)	NULL	only.
FileOwner	VADCHAD(255)	NII II I	Linux user owner for uploaded
FileOwner	VARCHAR(255)	NULL	files, applies to Linux only. Whether to enable
			HTTP/HTTPS for login access. 0 for disabled, 1 or NULL for
НТТР	VARCHAR(2)	NULL	enabled.
IIIIF	VARCHAR(2)	NOLL	Whether to hide the
			"Compressed" fact from file
			listings. 0 or NULL to show
			compression fact, 1 to hide
HideCompressedState	VARCHAR(2)	NULL	compression fact.
riideGompressedetate	V/11(O) I/(1(2)	INOLL	Whether to hide the
			"Encrypted" fact from file
			listings. 0 or NULL to show
			encryption fact, 1 to hide
HideEncryptedState	VARCHAR(2)	NULL	encryption fact.
			Whether to hide "Hidden" files
			and folders from Directory
			Listings. 0 or NULL to show
			hidden files/folders, 1 to hide
HideHidden	VARCHAR(2)	NULL	hidden files/folders.
			Whether to obfuscate
			passwords in Serv-U logs. 0 to
			show passwords in clear text,
HidePasswordInLog	VARCHAR(2)	NULL	1 or NULL to hide passwords.
			Home directory for the user
			account, as either a Windows
			local volume path or a UNC
			path. May require escape
5:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		characters depending on
HomeDir	VARCHAR(255)	NULL	database engine.
			How many seconds a session
			may perform no actions before
			it is considered idle. Interacts
			with BlockAntiTimeout limit to
IdlaTimaCasanda	\\\ D C \\ \ D \(20\)	NII II I	determine whether clients may
IdleTimeSeconds	VARCHAR(32)	NULL	keep sessions alive.



		1	Tage of the first
			Whether to include response
			codes in every line of multi-line
			message responses in FTP. 0
5	\(\(\bar{\chi} \bar{\chi} \chi \bar{\chi} \b		or NULL to not include, 1 to
IncludeRespCodesInMsgFiles	VARCHAR(2)	NULL	include.
			Whether the password to the
			file share is inserted in the
InsertPasswordInEmailInvite	VARCHAR(32)	NULL	email invitation to the share.
			Whether to interpret LF (Line
			Feed) as an End Of Line
			(EOL) character in text files.
			Useful for interaction with
			some mainframe systems. 0 or
			NULL to not interpret LF as
InterpretLFasEOL	VARCHAR(2)	NULL	EOL, 1 to interpret LF as EOL.
			Whether to lock a user in their
			Home Directory, hiding full
			drive paths from user. 0 for
2.	\(\(\bar{\alpha} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		show full path, 1 or NULL to
LockInHomeDir	VARCHAR(2)	1	lock user in Home Directory.
			Whether to force all listings to
			lower case, required by some
			mainframe clients. 0 or NULL
	\(\(\bar{\chi} \bar{\chi} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		for use true case, 1 to force
LowerCaseFileNames	VARCHAR(2)	NULL	lower-case listings.
			Whether to set modification-
			time of files uploaded by HTTP
			to the modification-time of the
			source file. 0 to abandon
	\		original time, 1 or NULL to
MaintainHTTPUploadTimes	VARCHAR(2)	NULL	maintain times.
	\		Maximum download rate for all
MaxGroupDownloadRate	VARCHAR(32)	NULL	members of group.
			Maximum sessions for all
MaxGroupSessions	VARCHAR(32)	NULL	members of group.
			Maximum sessions per IP
May Cray of Casalana ID	\/ADOL!AD(00)	NII II 1	address for all members of
MaxGroupSessionsIP	VARCHAR(32)	NULL	group.
	\/ADQUIAD(06)		Maximum upload rate for all
MaxGroupUploadRate	VARCHAR(32)	NULL	members of group.
	\/ADQ!!AT(55)	 	The maximum size of a single
MaxGuestUploadFileSize	VARCHAR(32)	NULL	file a guest user can upload.
			Maximum download speed for
	\/ADQ!!AT(55)	 	sessions initiated by user
MaxSessionDownloadRate	VARCHAR(32)	NULL	account.
			Maximum upload speed for
	\/ADQ!!AT(55)	 	sessions initiated by user
MaxSessionUploadRate	VARCHAR(32)	NULL	account.
			Maximum sessions from a
			single IP address utilizing the
MaxSessionsIPPerUser	VARCHAR(32)	NULL	account.
		 	Maximum sessions per user
MaxSessionsPerUser	VARCHAR(32)	NULL	account, total.



			Maximum size of an individual
MaxUploadFileSize	VARCHAR(32)	NULL	file upload, in bytes.
Waxopidai iiooize	V/ ((OZ)	INOLL	Maximum download speed for
MaxUserDownloadRate	VARCHAR(32)	NULL	user, total.
	, ,		Maximum upload speed for
MaxUserUploadRate	VARCHAR(32)	NULL	user, total.
			Minimum password length
MinPasswordLen	VARCHAR(32)	NULL	permitted for user account.
NaturalSort	VARCHAR(2)	NULL	Whether to use natural sorting for directory listings. 0 for using standard computational listings, 1 or NULL for natural listings.
NotifyAfterGuestDownload	VARCHAR(32)	NULL	Specifies whether a notification is sent after the guest user downloads files from a file share.
Tromy merodocidowineda	v/ ii (01 ii ii (02)	11022	Specifies whether a notification
NotifyAfterGuestUpload	VARCHAR(32)	NULL	is sent after the guest user uploads files to a file share.
ODBCVersion	VARCHAR(32)	NULL	Tracks upgrades made to the database table structure.
PasswordChange	VARCHAR(2)	NULL	Whether to allow user to change password. 0 or NULL for not permitted, 1 for permitted.
			How many days a password
PasswordExpiresDays	VARCHAR(32)	NULL	may be saved before expiring.
			Contents of email to be sent to users who recover passwords
PasswordRecoveryEmailMessage	VARCHAR(255)	NULL	online.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Subject of email to be sent to users who recover passwords
PasswordRecoveryEmailSubject	VARCHAR(255)	NULL	online.
PasswordStaleDays	VARCHAR(32)	NULL	How many days a password may be saved before being considered stale and due for change.
PasswordType	VARCHAR(32)	NULL	Specifies the type of password used for FTP connections.
PreDeleteDays	VARCHAR(32)	NULL	How many days before triggering account pre-delete event.
PreDisableDays	VARCHAR(32)	NULL	How many days before triggering account pre-disable event.
Quota	VARCHAR(32)	NULL	Total disk quota space allotted to user, in bytes.
RequireComplexPassword	VARCHAR(2)	NULL	Whether to require secure passwords, using upper-lower case and at least one digit. 0 or NULL to not require, 1 to require.



		T	
			Whether to require an email
			address for a user account. 0
RequireEmailAddressSet	VARCHAR(2)	NULL	or NULL for not required, or 1 for required.
RequireEmailAddressSet	VAINOLIAIN(2)	NOLL	Whether guest users are
			requested to provide a
			password when accessing a
RequirePasswordForGuests	VARCHAR(32)	NULL	file share.
RequireReverseDNSName	VARCHAR(2)	NULL	
			Whether to require secure
			connection from user before
			login. Forces incoming
			connections to be routed
			through FTPS, SFTP, or HTTPS or Serv-U will drop
RequireSecure	VARCHAR(2)	NULL	connection before
ResetGroupStatsAfterRestart	VARCHAR(2)	NULL	Currently unused.
1.000t010apotatoritoritostart	VAROLIMI(Z)	ITOLL	Whether to reset User
			statistics when Serv-U is
			restarted. 0 or NULL for do not
ResetUserStatsAfterRestart	VARCHAR(2)	NULL	restart, 1 for restart.
			Specifies the restriction on the
5 5) (4 D O (4 D (00))		number of days guest users
RestrictGuestAccessDays	VARCHAR(32)	NULL	can access a file share.
			Allows users who have access
			to whole system "/" to list out drives. 0 or NULL to restrict, 1
RootIsDrives	VARCHAR(2)	NULL	to allow.
			Maximum version of SFTP
			enabled for user account. Valid
SFTPMaxVersion	VARCHAR(32)	NULL	values are 4, 5, 6.
SMTPAccountName	VARCHAR(255)	NULL	Currently unused.
SMTPFromAddress	VARCHAR(255)	NULL	Currently unused.
SMTPFromName	VARCHAR(255)	NULL	Currently unused.
SMTPPassword	VARCHAR(255)	NULL	Currently unused.
SMTPRequiresLogin	VARCHAR(2)	NULL	Currently unused.
SMTPSSL	VARCHAR(2)	NULL	Currently unused.
SMTPServer	VARCHAR(255)	NULL	Currently unused.
SMTPServerPort	VARCHAR(32)	NULL	Currently unused.
SMTPUseSSLCertificate	VARCHAR(2)	NULL	Currently unused.
			Whether to enable SFTP for
0011	\/A D O L (A D (C)		user. 0 for disabled, 1 or NULL
SSH	VARCHAR(2)	NULL	for enabled.
			Authentication type to be used to for SSH/SFTP connections.
			0 for both public key and
			password, 1 for public key or
			password, 2 for public key
SSHAuthType	VARCHAR(32)	NULL	only, 3 for password only.
			Specifies whether the file
			sharing link is sent to the
SendAccessLinkToRecipients	VARCHAR(32)	NULL	recipient of the file share.



			Specifies whether the file
			sharing link is sent to the
SendAccessLinkToSender	VARCHAR(32)	NULL	creator of the file share.
	- (- /		Whether to apply
			Server/Domain Directory
			Access rules before
			user/group level rules, used
			when global rules are used to
			ban file attachments or file
			types. 0 or NULL for apply
			user-level rules first, 1 for
	= = =		apply Domain/Server rules
ServerDomainDirAccessFirst	VARCHAR(2)	NULL	first.
			Number of seconds before
0 T' (0 l-	\		individual session is
SessTimeoutSeconds	VARCHAR(32)	NULL	considered idle.
SignOnMossogo	\/ADCHAD(255)	NII II I	Text message to be displayed
SignOnMessage	VARCHAR(255)	NULL	upon user login.
SignOnMossageFileDath	VARCHAR(255)	NULL	Path to text file to be displayed
SignOnMessageFilePath	· '	NULL	for user login.
SupportLink	VARCHAR(255)	NULL	Currently unused.
			Specify number of seconds to lock user out after session
TimeoutBlockIPSeconds	VARCHAR(32)	NULL	timeout.
Timeoutblockii Seconds	VAROTAR(32)	NOLL	When enabled, treats
			Windows shortcuts as their
			targets in listings. 0 for
TreatWindowsShortCutsAsTarget	VARCHAR(2)	NULL	disabled, 1 for enabled.
3	- (/		What client to start for
			HTTP/HTTPS sessions. 0 to
			prompt the user, 1 for Web
WebClientStartupMode	VARCHAR(32)	NULL	Client, 2 for FTP Voyager JV.
·			When enabled, treats
			Windows shortcuts as links. 0
			or NULL for disabled, 1 for
WindowsShortCutsAsLinks	VARCHAR(2)	NULL	enabled.
			Specifies the directory that can
		 	be used as the source of
AdHocAllowedOutgoingSource	VARCHAR(32)	NULL	outgoing file shares.

Group Directory Access Table These entries map permissions to directories using a path name.

Field Name	Data Type	Default	Use
TableName	VARCHAR(32)	GroupDirAccess	The name of the table containing Directory Access information for Serv-U Groups.
GroupName	VARCHAR(255)	NULL	The name of the group to whom the rule applies.
SortIndex	INT	NULL	The order of the rule in the group's list of Directory Access rules.
Dir	VARCHAR(255)	NULL	The path or file path to which the rule applies.
Access	VARCHAR(32)	NULL	The permissions to the directory, in HEX XOR format, see KB1776.



			The maximum directory size for the directory
MaxSize	VARCHAR(32)	NULL	(optional).
			Windows only - for setting a user account for
NTUser	VARCHAR(255)	NULL	permissions to a specific directory.
			Windows only - for setting a user password for
NTPassword	VARCHAR(255)	NULL	permissions to a specific directory.
			Windows only - for setting a domain for
NTDomain	VARCHAR(255)	NULL	permissions to a specific directory.

Group Virtual Path - Group Virtual Path Table These entries each define a single virtual path for a single group.

Field Name	Data Type	Default	Use
			Name of the table containing Virtual Paths for
TableName	VARCHAR(32)	GroupVirtualPath	groups.
			The name of the group to which the Virtual
GroupName	VARCHAR(255)	NULL	Path applies.
PhysicalPath	VARCHAR(255)	NULL	The physical path to be mapped.
			The virtual path (typically in %HOME%\folder
VirtualPath	VARCHAR(255)	NULL	format).
			Whether to include the Virtual Path in
			"Maximum directory size" calculations. 0 or
IncludeInMaxSize	VARCHAR(2)	NULL	NULL to disable, 1 to enable.

Group IP Access Table These entries each define an IP access rules for a single user.

Field Name	Data Type	Default	Use
			Name of the table containing IP Access rules for
TableName	VARCHAR(32)	GroupIPAccess	groups.
			The name of the account to whom the IP Access
GroupName	VARCHAR(255)	NULL	rule applies.
			The order of the IP Access rule for the group
SortIndex	INT	NULL	account.
			The IP Address or range to be permitted or denied.
IP	VARCHAR(255)	NULL	IPv4, IPv6, wildcards, and CIDR blocks permitted.
Description	VARCHAR(255)	NULL	Text description of the rule.
			Whether to allow or deny the IP address or range. 0
Allow	VARCHAR(2)	NULL	for deny, 1 for allow.

GroupSUEvent - Group Events Table

These entries each define an event for a single group.

Field Name	Data Type	Default	Use
			Name of the table containing events for
TableName	VARCHAR(32)	GroupSUEvent	groups.
			The name of the group to which the rule
GroupName	VARCHAR(255)	NULL	applies.
			Whether the Event is enabled. 1 for enabled,
Enabled	VARCHAR(2)	NULL	0 for disabled.
EventID	VARCHAR(32)	NULL	The internal Serv-U ID of the event.
EventName	VARCHAR(255)	NULL	The name of the event.



Description	VARCHAR(255)	NULL	The description of the event.
			The type of action to be taken. NULL for
A attack	\/A D OL LA D (00)	.	email, 1 for balloon tip, 2 for execute
Action	VARCHAR(32)	NULL	command.
			For emails, the subject of the email. For
Data1	VARCHAR(255)	NULL	balloon tips, the subject of the balloon tip.
			For emails, the body of the email. For balloon
Data2	VARCHAR(255)	NULL	tips, the text in the balloon tip.
EmailToAddress	VARCHAR(255)	NULL	For emails, the recipients of the email.
EmailToAddressBCC	VARCHAR(255)	NULL	For emails, the BCC recipients of the email.
			For execute command events, the path to the
ExeFilePath	VARCHAR(255)	NULL	EXE or binary file to execute.
			For execute command events, the number of
			seconds to wait after event trigger to run
ExecWaitSecs	VARCHAR(32)	NULL	command.

<u>GroupSSHPublicKeyFile – Group SSH Public Key File Table</u>

Field Name	Data Type	Default	Use
		GroupSSHPu	Name of the table containing SSH public key
TableName	VARCHAR(32)	blicKeyFile	information for groups.
GroupName	VARCHAR(255)	NULL	Foreign key to the SUGroups table.
SSHPublicKeyName	VARCHAR(255)	NULL	Cosmetic name for the SSH public key (e.g. John's Work Notebook).
SSHPublicKeyPath	VARCHAR(255)	NULL	Path to the public key file to be used for the user account in SSH authentication.

Group Ratio Configuration Tables

These tables permit inheritable ratio settings for Serv-U's upload/download transfer ratios. Note that ratio statistics are NOT tracked at the group level – this only happens at the user level.

GroupUIDIRatioFreeFile

<u>Grouporbintation roof no</u>			
Field			
Name	Data Type	Default	Use
			Name of the table containing Ratio-free files
TableName	VARCHAR(32)	GroupUIDIRatioFreeFile	for groups.
			The name of the group to which the ratio-free
LoginID	VARCHAR(255)	NULL	file mask applies.
			The path or file name of the file or file type
			against which upload and download ratios will
Mask	VARCHAR(255)	NULL	not be applied.

GroupAttributeAvailability - Group Attribute Table This table is used to hold other group-specific attributes.

Field Name	Data Type	Default	Use
TableName	VARCHAR(32)	GroupAttributeAvailability	The name of the table containing Group-level attribute availability.
GroupName	VARCHAR(255)	NULL	The name of the group to which the attribute availability limit applies.
Attribute	VARCHAR(32)	NULL	The attribute ID of the attribute that will be limited. The attribute ID is



			equal to the text name of the attribute in Serv-U.
LimitToTimeOfDay	VARCHAR(32)	NULL	Whether to restrict the limit to certain hours of the day. 0 or NULL for do not limit, 1 to limit.
StartTime	VARCHAR(32)	NULL	Start time of the day to begin restrictions, in milliseconds from the start of the day.
EndTime	VARCHAR(32)	NULL	End time of day to end restrictions, in milliseconds from start of the day.
Sunday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Monday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Tuesday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Wednesday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Thursday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Friday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.
Saturday	VARCHAR(32)	NULL	1 to enable limit on this day of week, 0 to disable limit on this day of week.



Notices

This document is provided for use with the setup and maintenance of the Serv-U File Server. This manual is provided "AS IS" and without warranties as to the accuracy of the information or any other warranties whether expressed or implied. Because of the various hardware and software environments into which Serv-U ® may be put, NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS OFFERED.

Good data processing practice dictates that any new program should be thoroughly tested by the user with non-critical data before relying on it. The user must assume the entire risk of using the program. ANY LIABILITY OF THE SELLER WILL BE LIMITED EXCLUSIVELY TO PRODUCT REPLACEMENT OR, AT THE SELLER'S DISCRETION, A REFUND OF PURCHASE PRICE.

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