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Live Backup Developer's Toolkit

For Microsoft Windows® Server 2003 or Windows Server 2008
Operating Systems

Atempo 

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Table of Contents

Chapter 1	LiveBackup Server Development Toolkit	1
	Deployment package	2
	Remote access	3
	Security notes	4
	Execution	4
Chapter 2	RepositoryManager object	5
	Properties	5
	ConnectionTimeout property	5
	FunctionTimeout property	6
	ServerName property	6
	Methods	7
	AddInputDate method	8
	AddInputDouble method	8
	AddInputInteger method	9
	AddInputString method	9
	EOF method	10
	Execute method	10
	GetFieldIndexByName method	11
	GetFieldValue method	11
	MakeFunction method	12
	MoveNext method	12
	NextResultset method	13
	SetBackupDatabase method	13
	SetSystemDatabase method	14
Chapter 3	Management functions	15
	IConsole_ClientCreate_300	18
	IConsole_ClientDelete	23
	IConsole_ClientGetInfo_300	24
	IConsole_ClientList	28
	IConsole_ClientRename_262	30
	IConsole_ClientResume	31
	IConsole_ClientSetInfo_300	32
	IConsole_ClientStop	36
	IConsole_GroupCreate_300	37
	IConsole_GroupGetInfo_300	43
	IConsole_GroupList	47

IConsole_GroupSetInfo_300	48
IConsole_ReportClientsActivity.....	54
Bit descriptions for macros.....	55
MacroIncludes	55
MacroExcludes	56
Sample code	57

Chapter 4 Metering functions **59**

IReport_DataProtected	60
IReport_SpaceConsumption.....	62
IReport_ClientsActivity	63
IReport_Billing.....	66
Sample code	68

C H A P T E R 1

Live Backup Server Development Toolkit



This document describes how to access the Application Programming Interface (API) to Live Backup Server to perform specific management and metering functions.

These functions are exposed through the `RepositoryManager` object. In this chapter, you will learn about

- Deployment package
- Remote access
- Security notes
- Execution

Following chapters describe the `RepositoryManager` object and all available functions.

Deployment package

The Development Toolkit is included as a component of the Live Backup Server installation. The Live Backup Server Setup program installs all required files into a MANAGEMENT API subfolder of the Live Backup Server program folder, and registers the RepositoryManager object.

The MANAGEMENT API folder contains the following files:

RepositoryManager.dll	COM component containing the RegistryManager object
RepositoryManager.bat	Batch file to register the object.
Management API.pdf	Documentation for the development toolkit.
CreateClient.hta	Sample code. See page 57 .
RenameClient.hta	Sample code. See page 57 .
GetAndSetClientProperties.hta	Sample code. See page 57 .
DeleteClient.hta	Sample code. See page 57 .
GetGroupList.hta	Sample code. See page 57 .
GetClientList.hta	Sample code. See page 57 .

Remote access

You can deploy the entire API package to a remote computer running any of the following operating systems:

- Windows 2000 Server
- Windows 2000 Advanced Server
- Windows Server 2003 Web Edition
- Windows Server 2003 Standard Edition
- Windows Server 2003 Enterprise Edition
- Windows XP Professional
- Windows Server 2008 Standard Edition
- Windows Server 2008 Enterprise Edition

To deploy the package, copy the MANAGEMENT API folder to the remote computer. Then register the object by running REPOSITORYMANAGER.BAT.

Security notes

The methods of the RepositoryManager object must be invoked from the security context that has administrative rights on the Live Backup Server computer.

Execution

To execute any function, an application or script should perform the following steps:

1. Set the name of the function to be executed.
2. Set input parameters, applicable to this particular function.
3. Invoke the function execution.
4. Analyze the return value (if defined for the function).
5. Get the result data from the function via one or two sequential result sets.

CHAPTER 2

2

RepositoryManager object

This chapter describes the properties and methods of the RepositoryManager Object that are required to specify the management functions and parameters, and to access the result values.

For information on functions, see [“Management functions” on page 15](#) and [“Metering functions” on page 59](#).

Properties

The RepositoryManager.Generic Object has three properties:

- ConnectionTimeout property
- FunctionTimeout property
- ServerName property

All properties are optional: unless specified, the default value will be used.

ConnectionTimeout property

The **ConnectionTimeout** property specifies a wait time for establishing a connection before terminating the attempt and raising an error. The value indicates how many seconds to wait for the connection to open.

Access	Read/Write
Type	Long
Default	15

Example

```
Dim rmg
set rmg = CreateObject("RepositoryManager.Generic")
    rmg.ConnectionTimeout=10
```

FunctionTimeout property

The **FunctionTimeout** property specifies a wait time for executing a function before terminating the attempt and raising an error. The value indicates how many seconds to wait for a function to complete. A value of **0** indicates an infinite timeout.

Access	Read/Write
Type	Long
Default	0

Example

```
Dim rmg
set rmg = CreateObject("RepositoryManager.Generic")
    rmg.FunctionTimeout=30
```

ServerName property

The **ServerName** property specifies the name of Live Backup Server computer to which you want to connect. If no server name is specified, then the local server will be connected.

Access	Read/Write
Type	String
Default	"(local)"

Example

```
Dim rmg
set rmg = CreateObject("RepositoryManager.Generic")
    rmg.ServerName=Live BackupServerName
```

Methods

The **RepositoryManager.Generic** object has the following methods:

- AddInputDate method
- AddInputDouble method
- AddInputInteger method
- AddInputString method
- EOF method
- Execute method
- GetFieldIndexByName method
- GetFieldValue method
- MakeFunction method
- MoveNext method
- NextResultset method
- SetBackupDatabase method
- SetSystemDatabase method

Example

```
Dim rmg, valueReturn
set rmg = CreateObject("RepositoryManager.Generic")
    rmg.MakeFunction( "IConsole_ClientList") 'set function
name
    rmg.AddInputInteger null      'add an integer argument;
null means
                                get a list of all clients
    valueReturn = rmg.Execute() 'execute method and get
return value
```

AddInputDate method

Appends an input argument of the date type to the function that was previously selected by the **MakeFunction** method.

Syntax (VB)

```
object.AddInputInteger valueDate
```

Return Value

None

Parameters

valueDate | A variant variable that contains the value of the date input parameter.

Remarks

Call this method after calling the **MakeFunction** method. Arguments are passed to the calling function in the same order as they are appended.

AddInputDouble method

Appends an input argument of the double type to the function that was previously selected by the **MakeFunction** method.

Syntax (VB)

```
object.AddInputInteger valueDouble
```

Return Value

None

Parameters

valueDouble | A variant variable that contains the value of the double input parameter.

Remarks

Call this method after calling the **MakeFunction** method. Arguments are passed to the calling function in the same order as they are appended.

AddInputInteger method

Appends an input argument of the integer or Boolean type to the function that was previously selected by the **MakeFunction** method.

Syntax (VB)

```
object.AddInputInteger valueInteger
```

Return Value

None

Parameters

valueInteger | A variant variable that contains the value of integer or Boolean input parameter

Remarks

Call this method after calling the **MakeFunction** method. Arguments are passed to the calling function in the same order as they are appended.

AddInputString method

Appends an input argument of the string type to the function that was previously selected by the **MakeFunction** method.

Syntax (VB)

```
object.AddInputString valueString
```

Return Value

None

Parameters

valueString | A variant variable that contains the value of the string input parameter.

Remarks

Call this method after calling the **MakeFunction** method. Arguments are passed to the calling function in the same order as they are appended.

EOF method

Indicates if the current result set cursor is positioned after the last record.

Syntax (VB)

Return Value = *object*.**EOF**

Return Value

A Boolean value. *True* if the current result set cursor positioned after the last record; otherwise, *False*.

Parameters

None

Remarks

Use this method to check if the current record exists after calling the method **MoveNext**.

Execute method

Executes a function defined by the method **MakeFunction** with arguments defined by the methods [AddInputDate method](#), [AddInputDouble method](#), [AddInputInteger method](#), and [AddInputString method](#) in the server defined by the [ServerName property](#).

Syntax (VB)

[ReturnValue =] *object*.**Execute**

Return Value

An integer return code value as returned by the function.

Parameters

None

Remarks

This method raises the error -2147220991 (80040201 hexadecimal) if the connection is not established within connection timeout. See [“ConnectionTimeout property” on page 5](#).

The method immediately returns the return value code returned by the function called. If the function returns some result sets, then their values are available via the [GetFieldValue method](#), [MoveNext method](#), and [NextResultset method](#).

GetFieldIndexByName method

Returns the zero-based ordinal number of the field specified by its name.

Syntax (VB)

Return Value = `object.GetFieldIndexByName variantName`

Return Value

Zero-based ordinal number of the field. **-1** if not found.

Parameters

variantName | A variant that specifies the file by its name.

Remarks

This method improves performance when the result set contains many records. Do not use if the result set contains only a few records.

GetFieldValue method

Returns the value of the field specified by the current record of the current result set.

Syntax (VB)

Return Value = `object.GetFieldValue variantIndex`

Return Value

A variant that contains the value of the field specified.

Parameters

variantIndex | A variant that specifies the field for which to obtain a value.
If the variant is of the integer type, then this variant is treated as zero-based ordinal field number; otherwise, the variant is treated as the field name.

Remarks

The result set fields are zero-based numbered.

MakeFunction method

Sets the name of the function to execute.

Syntax (VB)

```
object.MakeFunction nameOfFunction
```

Return Value

None

Parameters

nameOfFunction | A string variable that contains the name of a function to execute.

Remarks

Set the desired value of the command timeout before calling this method. See [“FunctionTimeout property” on page 6](#).

MoveNext method

Moves the result set cursor to the next record.

Syntax (VB)

```
[Return Value=] object.MoveNext
```

Return Value

A Boolean value. *True* if the record exists; otherwise, *False*.

Parameters

None

Remarks

Use this method if the function called may return a result set with several records.

NextResultset method

Makes the next available result set current.

Syntax (VB)

Return Value = `object.NextResultset`

Return Value

True if the next result set is present; otherwise, *False*.

Remarks

Use this method only if the executed function produces more than one result set.

SetBackupDatabase method

Sets the target database to the Live Backup backup database. This database is not the default. Use this method if a function description requires the Live Backup backup database as the target.

Syntax (VB)

object.`SetBackupDatabase`

Return Value

None.

Parameters

None.

Remarks

This method affects the result of subsequent calls of the *Execute* method.

SetSystemDatabase method

Sets the target database to the Live Backup system database. This database is the default. This method should be invoked if the *SetBackupDatabase* has been invoked at any time since the object has been created.

Syntax (VB)

object.SetSystemDatabase

Return Value

None.

Parameters

None.

Remarks

This method affects the result of subsequent calls of the *Execute* method.

CHAPTER 3

3

Management functions

The following management functions can be invoked via the `RepositoryManager.Generic` object:

- **`IConsole_ClientCreate_300`**: Creates a new client
- **`IConsole_ClientDelete`**: Deletes an existing client.
- **`IConsole_ClientGetInfo_300`**: Displays the properties of a client.
- **`IConsole_ClientList`**: Displays the list of clients.
- **`IConsole_ClientRename_262`**: Renames a client.
- **`IConsole_ClientResume`**: Resumes a stopped client.
- **`IConsole_ClientSetInfo_300`**: Modifies properties of a client.
- **`IConsole_ClientStop`**: Stops a client.
- **`IConsole_GroupCreate_300`**: Creates a new group.
- **`IConsole_GroupGetInfo_300`**: Displays the properties of a group.
- **`IConsole_ClientSetInfo_300`**: Displays a list of subgroups.
- **`IConsole_GroupSetInfo_300`**: Modifies properties of a group.
- **`IConsole_ReportClientsActivity`**: Reports on the activity of a specified client.

For each function, the following may apply:

- Inheritance notes
- Arguments
- Return value codes
- Result set

Inheritance notes

The inheritance notes of a function describe how the inheritance flag of applicable arguments is treated.

Argument tables

For each function, a table of required arguments are listed in the order that they must be passed. You must include all arguments.

The *Name* of the argument is supplied for mnemonic and document reference purposes only.

The *Type* of argument determines the method that you must use. See the table below.

Argument Type	Usage
Boolean	Use the AddInputInteger method of the RepositoryManager.Generic object. The variant that is passed has an implicit conversion to the VB variant type <i>Boolean</i> .
Date	Use the AddInputDate method of the RepositoryManager.Generic object. The variant that is passed has an implicit conversion to the VB variant type <i>Date</i> .
Double	Use the AddInputDouble method of the RepositoryManager.Generic object. The variant that is passed has an implicit conversion to VB variant type <i>Double</i> .
Integer	Use the AddInputInteger method of the RepositoryManager.Generic object. The variant that is passed has an implicit conversion to the VB variant type <i>Long</i> or <i>Int</i> .
String	Use the AddInputString method of the RepositoryManager.Generic object. The variant that is passed has an implicit conversion to the VB variant type <i>String</i> .

The *Description* of the argument describes the function as well as how to specify values.

Return value codes

Each management function returns an integer return code value. A zero return value means success, whereas any nonzero value indicates an error.

Result set

Functions can return many, one, or no records. If the result set contains only one record, then all the fields of this record are accessible immediately after completion of the `Execute` method (no need to call `Next` method). If the result set contains multiple records, then call `Next` method to access second, third, etc. records in the result set sequentially.

In the description of any function that returns a result set, the following information is available:

The column *Field name/ordinal number* contains the name of the field or an ordinal field number. If the content of this column can be treated as an integer, then it means ordinal number; otherwise, it is a field name. In both cases, it is to be used as an argument of the [GetFieldValue method](#) of a **RepositoryManager.Generic** object. This method returns a variant value.

The [GetFieldValue method](#) returns a variant in any case. The column *Type* describes the VB type of this variant, as follows:

- **Integer** means that the variant can be of numeric types
- **String** means VB String type
- **Date** means VB Date type
- **Boolean** means VB Boolean type
- **Double** means VB Double type

IConsole_ClientCreate_300

This function creates a new client with the specified attributes. Argument names correspond to the attribute names.

An attribute may have a null value only if specifically noted.

Notes on inheritance

If an argument of this function has its inheritance flag, then

- If the argument is *null* and its inheritance flag argument is *null*, then the new value of the attribute and its inheritance flag will both be *null*, if allowed. Otherwise, an error occurs.
- If the argument is *null* and its inheritance flag parameter is *true*, then the new value of the attribute is inherited from the parent group, and the new value of the inheritance flag is *true*.
- If the argument is *null* and its inheritance flag is *false*, then the new value of the attribute is set to *null*, if allowed. Otherwise, an error occurs. The new value of the inheritance flag is *false*.
- If the argument is *not null* and its inheritance flag argument is *null*, then they will both be saved as the new values of the attribute and its inheritance flag, if allowed. Otherwise, an error occurs.
- If the argument is *not null* and its inheritance flag argument is *true*, then the new value of the attribute is inherited from the parent group, and the new value of the inheritance flag is *true*.
- If the argument is *not null* and its inheritance flag is *false*, then the new value of the attribute is set to the argument value. The new value of the inheritance flag is *false*.

If an argument does not have its inheritance flag then:

- If the argument is *not null*, then the new value of the attribute is set to the argument value.
- If the argument is *null*, then the attribute value is not changed, if allowed. Otherwise, an error occurs.

Arguments

Name	Type	Def.	Inheritance	Value
Name	String	NA	NA	Short name of the client. May be up to 50 Unicode symbols.
ParentGID	Integer	NA	NA	Numeric ID of the parent group.
Comments	String	NA	NA	Custom comments
FullProtection	Boolean	Null	isInhFullProtection	State of the client protection mode. True full protection mode. False user document protection mode.
isInhFullProtection	Boolean	True	NA	Inheritance flag for FullProtection. True enabled. False disabled.
DriveMask	Integer	Null	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer. The lowest bit represents the volume A:
isInhDriveMask	Boolean	True	NA	Inheritance flag for DriveMask. True enabled. False disabled. Must have the same value as isInhFullProtection .
MacroIncludes	Integer	Null	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. 1 means the macro type is on or selected. See “MacroIncludes” on page 55 .
isInhMacroIncludes	Boolean	True	NA	Inheritance flag for MacroIncludes. True enabled. False disabled.
IncludeMask	String	Null	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the " " character.

isInhIncludeMasks	Boolean	True	NA	Inheritance flag for IncludeMasks. True enabled. False disabled. Must have the same value as isInhMacroIncludes .
MacroExcludes	Integer	Null	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. 1 means the appropriate macro type is on or selected. See " MacroExcludes " on page 56.
isInhMacroExcludes	Boolean	True	NA	Inheritance flag for MacroExcludes True enabled. False disabled.
ExcludeMasks	String	Null	isInhExcludeMasks	Consists of substrings, each of which represents one Discardable mask. Substrings are delimited by the " " character.
isInhExcludeMasks	Boolean	True	NA	Inheritance flag for ExcludeMasks. True enabled. False disabled. Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	Null	isInhArchiveConnection	Numeric ID of a connection to LiveArchive server.
DiscardData	Boolean	Null	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchive Server during archiving.
isInhArchiveConnection	Boolean	True	NA	Inheritance flag for ArchiveConnection and DiscardData. True enabled. False disabled.
age_isEnabled	Boolean	Null	age_isInh	True DataAging is enabled. False DataAging disabled.
age_daysKeepVersion	Double	Null	age_isInh	Continuous protection window (in days).
age_daysKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per day (in days).

age_weeksKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per week (in weeks).
age_monthsKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per month (in months).
age_isInh	Boolean	True	NA	Inheritance flag for age_isEnabled , age_daysKeepVersion , age_daysKeepCP , age_weeksKeepCP , age_monthsKeepCP . True enabled. False disabled.
FeatureLockdownID	Integer	Null	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group: 0 no rights 1 "User" rights 2 "Power User" rights 3 "Super User" rights
isInhFeatureLockdownID	Boolean	True	NA	Inheritance flag for FeatureLockdownID . True enabled. False disabled.
DateExpiration	Date	Null	isInhDateExpiration	Client expiration date. Null the client will never expire.
isInhDateExpiration	Boolean	True	NA	Inheritance flag for DateExpiration . True enabled. False disabled.
sizeMBStart	Float	Null	NA	The initial size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBMax	Float	Null	NA	The maximum size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBInc	Float	Null	NA	The growth increment of the local storage in MB. Null This value is to be inherited from the parent group.

letterDB	String	Null	NA	Disk logical name ("C", "D", ...), where the local storage is to be located. Null This value is to be inherited from the parent group.
-----------------	--------	------	----	--

Return value code

Any non-zero value indicates an error.

0	Success
3	Parent group not found
4	Duplicate name; a client exists with the same name in the target parent group.

Result set

The result set contains zero or one record.

Field name/ ordinal number	Type	Description
0	Integer	0 the new client is created successfully. Try to read the value of the field 1 only if this field value is 0. Nonzero error. Do not read the value of the field 1 in the case.
1	Integer	ID of the new client. Try to read this value only if the value of the field 0 has a value of 0.

Iconsole_ClientDelete

Deletes the specified client.

Arguments

Name	Type	Description
Id	Integer	ID of the client.

Return value code

0	Success
non-zero	Error

IConsole_ClientGetInfo_300

Returns a one-record result set containing properties of the specified client.

Arguments

Name	Type	Description
Id	Integer	ID of the client.

Return value code

0	Success
non-zero	Error

Result set

The result set contains zero or one record, with the following information:

Field name/ ordinal number	Type	Inheritance	Description
Id	Integer	NA	ID of the client.
Name	String	NA	Short name of the client.
ParentGID	Integer	NA	ID of the parent group.
HName	String	NA	Compound name of the client.
CreationDate	Date	NA	Date and time when the client account was created.
Comments	String	NA	Comments on the client account.
FullProtection	Boolean	isInhFullProtection	True full protection mode. False user document protection only.
isInhFullProtection	Boolean	NA	True the previous parameter's value is inherited from the parent group. It will be changed automatically if the corresponding parent group parameter is changed. False changing the corresponding parameter of the parent group does not affect the value of the previous parameter.
DriveMask	Integer	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer. The lowest bit represents the volume A:
isInhDriveMask	Boolean	NA	Must have the same value as isInhFullProtection .

MacroIncludes	Integer	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. If the bit is 1, then the macro type is <i>on</i> or <i>selected</i> . To learn the meaning of each bit, see “MacroIncludes” on page 55 .
isInhMacroIncludes	Boolean	NA	True the previous parameter’s value is inherited from the parent group. It will be changed automatically if the corresponding parent group parameter is changed. False changing the corresponding parameter of the parent group does not affect the value of the previous parameter.
IncludeMasks	String	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the character.
isInhIncludeMasks	Boolean	NA	Must have the same value as isInhMacroIncludes .
MacroExcludes	Integer	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. If the bit is 1 then appropriate macro type is <i>on</i> or <i>selected</i> . To learn the meaning of each bit, see “MacroExcludes” on page 56 .
isInhMacroExcludes	Boolean	NA	True the previous parameter’s value is inherited from the parent group. It will be changed automatically if the corresponding parent group parameter is changed. False changing the corresponding parameter of the parent group does not affect the value of the previous parameter.
ExcludeMasks	String	NA	Consists of substrings, each of which represents one Discardable Data mask. Substrings are delimited by the character.
isInhExcludeMasks	Boolean	NA	Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	isInhArchiveConnection	Numeric ID of a connection to the LiveArchive Server.

DiscardData	Boolean	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchiveServer during archiving.
isInhArchiveConnection	Boolean	NA	Inheritance flag for ArchiveConnection and DiscardData True enabled False disabled
age_isEnabled	Boolean	age_isInh	True Data Aging is enabled False Data Aging is disabled
age_daysKeepVersion	Double	age_isInh	Continuous protection window in days.
age_daysKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per day, in days.
age_weeksKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per week, in weeks.
age_monthsKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per month, in months.
age_isInh	Boolean	NA	Inheritance flag for age_isEnabled age_daysKeepVersion age_daysKeepCP age_weeksKeepCP age_monthsKeepCP True enabled. False disabled.
FeatureLockdownID	Integer	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group. 0 No rights 1 User rights 2 Power User rights 3 Super User rights
isInhFeatureLockdownID	Boolean	NA	True the value of the previous parameter is inherited by the parent group. It will be changed automatically if the corresponding group parameter is changed. False changing the corresponding parameter of the parent group does not affect the value of the previous parameter.
DateExpiration	Date	isInhDateExpiration	Date and time when this client account expires. Null the client will never expire.

isInhDateExpiration	Boolean	NA	True the value of the previous parameter is inherited by the parent group. It will be changed automatically if the corresponding parent group parameter is changed. False changing the corresponding parameter of the parent group does not affect the value of the previous parameter.
isExpired	Boolean	NA	The client is expired.
sizeMBStart	Double	NA	The initial size of the local storage in MB.
sizeMBMax	Double	NA	The maximum size of the local storage in MB.
sizeMBInc	Double	NA	The growth increment of the local storage in MB.
pathDB	String	NA	The path to local storage files.
sizeMBCurrent	Double	NA	The current size of the local storage in MB.
sizeMBUsed	Double	NA	The used size of the local storage in MB.

IConsole_ClientList

Returns a result set containing a list of clients that belong to the specified parent group.

Arguments

Name	Type	Description
Pgid	Integer	ID of a group. Only clients having this parent group will be listed in the result set. Null all clients.

Return value code

0	Success
non-zero	Error

Result set

Contains one record per client with the following information.

Field name/ ordinal number	Type	Description
Id	Integer	ID of the client
Name	String	Short name of the client.
Allocated	Integer	The size of the local storage in pages. 128 pages = 1 MB.
Status	Integer	<p>The first half-byte (Status & 0xF) enumerates the status:</p> <ul style="list-style-type: none"> 2 client is stopped by administrator 3 creation of database failed 4 creation of database is suspended 5 client-side software has incompatible version 6 creation of the database is in progress <p>The second half-byte (Status & 0xF0) enumerates the extended status:</p> <ul style="list-style-type: none"> 0x10 the database is damaged 0x20 the database is obsolete and can't be upgraded to the installed Live Backup version. 0x40 database is queued to upgrade to the installed version. <p>Client account is active if Status is 0.</p>
Is initialized	Integer	<ul style="list-style-type: none"> 1 client is assigned to a defined remote machine that is protected. 0 client is not yet assigned to a definite remote machine
Comments	String	Comments on the client account.

Used	Integer	Quantity of used data pages. 128 pages = 1 MB.
GroupHName	String	Compound name of the group to which the client belongs.
age_isEnabled	Boolean	True data aging for this client is prohibited. False data aging is enabled.
Client.Stopped	Boolean	True client is stopped. False client is not stopped.
StoppedByAdmin	Boolean	True client is stopped by an administrator. False client is not stopped by an administrator
OutOfSpace	Boolean	True the server has tried but failed to increase the local storage size, and the client has not resumed since that time. False any other space condition.
LB_InfoUpdateTime	Date	Date and time when the client information was last updated.
dtLastSuccessClientCall	Date	Date and time when the server detected the last successful request from the remote protected client machine.
dtLastClientCall	Date	Date and time when the server detected the last request from the remote protected client machine, regardless of whether this request was properly processed.
DateExpiration	Date	Date and time when this client account expires. Null the client will never expire.

IConsole_ClientRename_262

Renames the client specified by its ID.

Arguments

Name	Type	Description
Id	Integer	ID of the client to rename.
newName	String	New name of the client, up to 50 Unicode symbols.
arg3	String	Reserved: Must have the same value as for newName .

Return value code

0	Success
non-zero	Error

Result set

None

IConsole_ClientResume

Resumes the client specified by its ID.

Arguments

Name	Type	Description
Id	Integer	ID of the client to resume.

Return value code

0	Success
non-zero	Error

Result set

None

Remarks

This function resumes clients stopped by function **IConsole_ClientStop**. See [“IConsole_ClientStop” on page 36](#).

IConsole_ClientSetInfo_300

Updates client settings.

An attribute may have a null value only is specifically noted.

Notes on inheritance

If an argument of this function has its inheritance flag, then

- If both the argument and its inheritance flag argument are *null*, then the new value of the attribute and its inheritance flag value are not changed.
- If the argument is *null* and its inheritance flag parameter is *true*, then the new value of the attribute is inherited from the parent group and new value of the inheritance flag is *true*.
- If the argument is *null* and its inheritance flag is *false*, then the new value of the attribute is set to *null*, if allowed. Otherwise, an error occurs. The new value of the inheritance flag is *false*.
- If the argument is *not null* and its inheritance flag argument is *null*, then the new value of the attribute depends on the current value of the inheritance flag. If it is *true*, then the attribute value is not changed; otherwise, the new attribute value is set to the argument value. The inheritance flag value is not changed in both cases.
- If the argument is *not null*, and its inheritance flag argument is *true*, then the new value of the attribute is inherited from the parent group and the new value of the inheritance flag is *true*.
- If the argument is *not null* and its inheritance flag is *false*, then the new value of the attribute is set to the argument value. The new value of the inheritance flag is *false*.

If an argument does not have its inheritance flag then:

- If the argument is *not null*, then the new value of the attribute is set to the argument value.
- If the argument is *null*, then the attribute value is not changed.

Arguments

Name	Type	Def.	Inheritance	Value
Uid	Integer	NA	NA	Numeric ID of the client.
Name	String	Null	NA	Short name of the client. May be up to 50 Unicode symbols.
ParentGID	Integer	Null	NA	Numeric ID of the parent group.
Comments	String	Null	NA	Custom comments
FullProtection	Boolean	Null	isInhFullProtection	State of the client protection mode. True full protection mode. False user document protection mode.
isInhFullProtection	Boolean	True	NA	Inheritance flag for FullProtection. True enabled. False disabled.
DriveMask	Integer	Null	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer.
isInhDriveMask	Boolean	Null	NA	Inheritance flag for DriveMask. True enabled. False disabled. Must have the same value as isInhFullProtection .
MacroIncludes	Integer	Null	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. 1 means the macro type is on or selected. See "MacroExcludes" on page 56.
isInhMacroIncludes	Boolean	Null	NA	Inheritance flag for MacroIncludes. True enabled. False disabled.
MacroExcludes	Integer	Null	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. 1 means the appropriate macro type is on or selected. See "MacroExcludes" on page 56.

isInhMacroExcludes	Boolean	Null	NA	True the value of the previous parameter is ignored and the corresponding value from the parent group is used. False the value of the previous parameter is used. Null if the previous parameter is <i>Null</i> as well, then no changes to MacroExcludes.
IncludeMasks	String	Null	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the " " character.
isInhIncludeMasks	Boolean	Null	NA	Inheritance flag for IncludeMasks. True enabled. False disabled. Must have the same value as isInhMacroIncludes .
ExcludeMasks	String	Null	isInhExcludeMasks	Consists of substrings, each of which represents one Discardable mask. Substrings are delimited by the " " character.
isInhExcludeMasks	Boolean	Null	NA	Inheritance flag for ExcludeMasks. True enabled. False disabled. Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	Null	isInhArchiveConnection	Numeric ID of a connection to LiveArchive server.
DiscardData	Boolean	Null	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchive Server during archiving.
isInhArchiveConnection	Boolean	Null	NA	Inheritance flag for ArchiveConnection and DiscardData . True enabled. False disabled.
age_isEnabled	Boolean	Null	age_isInh	True DataAging is enabled. False DataAging disabled.
age_daysKeepVersion	Double	Null	age_isInh	Continuous protection window (in days).
age_daysKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per day (in days).

age_weeksKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per week (in weeks).
age_monthsKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per month (in months).
age_isinh	Boolean	True	NA	Inheritance flag for age_isEnabled , age_daysKeepVersion , age_daysKeepCP , age_weeksKeepCP , and age_monthsKeepCP . True enabled. False disabled.
FeatureLockdownID	Integer	Null	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group: 0 no rights 1 "User" rights 2 "Power User" rights 3 "Super User" rights
isInhFeatureLockdownID	Boolean	True	NA	Inheritance flag for FeatureLockdownID . True enabled. False disabled.
DateExpiration	Date	Null	isInhDateExpiration	Client expiration date. Null the client will never expire.
isInhDateExpiration	Boolean	True	NA	Inheritance flag for DateExpiration . True enabled. False disabled.

Return value code

Any non-zero value indicates an error.

0	Success
1	Client account is not found.
3	Parent group not found
4	Duplicate name; a client exists with the same name in the target parent group.

IConsole_ClientStop

Stops the client specified by its ID.

Arguments

Name	Type	Description
Id	Integer	ID of the client to stop.

Return value code

0	Success
non-zero	Error

Result set

None

Remarks

A client stopped by this function may be resumed using function **IConsole_ClientResume**. See “IConsole_ClientResume” on page 31.

IConsole_GroupCreate_300

Creates a new group with the specified attributes. Argument names correspond to the attribute names.

An attribute may have a null value only if specifically noted.

Notes on inheritance

If an argument of this function has its inheritance flag, then

- If the argument is *null* and its inheritance flag argument is *null*, then the new value of the attribute and its inheritance flag will be *null*, if allowed. Otherwise, an error occurs.
- If the argument is *null* and its inheritance flag argument is *true*, then the new value of the attribute is inherited from the parent group and new value of the inheritance flag is *true*.
- If the argument is *null* and its inheritance flag is *false*, then the new value of the attribute is set to *null*, if allowed. Otherwise, an error occurs. The new value of the inheritance flag is *false*.
- If the argument is *not null* and its inheritance flag argument is *null*, then both will be saved as the new values of the attribute and its inheritance flag, if allowed. Otherwise an error occurs.
- If the argument is *not null* and its inheritance flag argument is *true*, then the new value of the attribute is inherited from the parent group and new value of the inheritance flag is *true*.
- If the argument is *not null* and its inheritance flag is *false*, then the new value of the attribute is set to the argument value. The new value of the inheritance flag is *false*.

If an argument does not have its inheritance flag then:

- If the argument is *not null*, then the new value of the attribute is set to the argument value.
- If the argument is *null*, then the attribute value is not changed, if allowed. Otherwise an error occurs.

Arguments

Name	Type	Def.	Inheritance	Value
Name	String	NA	NA	Short name of the group. May be up to 50 Unicode symbols.
ParentGID	Integer	NA	NA	Numeric ID of the parent group.
Comments	String	NA	NA	Custom comments
FullProtection	Boolean	Null	isInhFullProtection	State of the client protection mode. True full protection mode. False user document protection mode.
isInhFullProtection	Boolean	True	NA	Inheritance flag for FullProtection. True enabled. False disabled.
DriveMask	Integer	Null	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer. The lowest bit represents the volume A:
isInhDriveMask	Boolean	True	NA	Inheritance flag for DriveMask. True enabled. False disabled. Must have the same value as isInhFullProtection .
MacroIncludes	Integer	Null	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. 1 means the macro type is on or selected. See "MacroIncludes" on page 55.
isInhMacroIncludes	Boolean	True	NA	Inheritance flag for MacroIncludes. True enabled. False disabled.
IncludeMasks	String	Null	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the " " character.

isInhIncludeMasks	Boolean	True	NA	Inheritance flag for IncludeMasks. True enabled. False disabled. Must have the same value as isInhMacroIncludes .
MacroExcludes	Integer	Null	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. 1 means the appropriate macro type is on or selected. See “MacroExcludes” on page 56.
isInhMacroExcludes	Boolean	True	NA	Inheritance flag for MacroExcludes True enabled. False disabled.
ExcludeMasks	String	Null	isInhExcludeMasks	Consists of substrings, each of which represents one Discardable mask. Substrings are delimited by the " " character.
isInhExcludeMasks	Boolean	True	NA	Inheritance flag for ExcludeMasks. True enabled. False disabled. Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	Null	isInhArchiveConnection	Numeric ID of a connection to LiveArchive server.
DiscardData	Boolean	Null	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchive Server during archiving.
isInhArchiveConnection	Boolean	True	NA	Inheritance flag for ArchiveConnection and DiscardData. True enabled. False disabled.
age_isEnabled	Boolean	Null	age_isInh	True DataAging is enabled. False DataAging disabled.
age_daysKeepVersion	Double	Null	age_isInh	Continuous protection window (in days).
age_daysKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per day (in days).

age_weeksKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per week (in weeks).
age_monthsKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per month (in months).
age_isinh	Boolean	True	NA	Inheritance flag for age_isEnabled , age_daysKeepVersion , age_daysKeepCP , age_weeksKeepCP , and age_monthsKeepCP . True enabled. False disabled.
FeatureLockdownID	Integer	Null	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group: 0 no rights 1 "User" rights 2 "Power User" rights 3 "Super User" rights
isInhFeatureLockdownID	Boolean	True	NA	Inheritance flag for FeatureLockdownID . True enabled. False disabled.
DateExpiration	Date	Null	isInhDateExpiration	Client expiration date. Null the client will never expire.
isInhDateExpiration	Boolean	True	NA	Inheritance flag for DateExpiration . True enabled. False disabled.
AutoCreate	Boolean	Null	isInhAutoCreate	True Clients in this group may be created automatically. False Deny auto-creation requests to this group.
AutoCreateMode	Integer	Null	isInhAutoCreate	1 Client will be activated at specified time. 2 Client will be activated after specified time. Any other value Client will not be activated.
AutoCreateDate	Date	Null	isInhAutoCreate	If AutoCreate mode is 1 Then this is the specific time when client will be activated. 2 Then this is the time period after which client will be activated.

isInhAutoCreate	Boolean	True	NA	Inheritance flag for AutoCreate , AutoCreateMode , AutoCreateDate . True enabled. False disabled.
sizeMBStart	Float	Null	size_isInh	The initial size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBMax	Float	Null	size_isInh	The maximum size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBInc	Float	Null	size_isInh	The growth increment of the local storage in MB. Null This value is to be inherited from the parent group.
letterDB	String	Null	size_isInh	Disk logical name (“C”, “D”, ...), where the local storage is to be located. Null This value is to be inherited from the parent group.
size_isInh	Boolean	True	NA	Inheritance flag for sizeMBStart , sizeMBMax , sizeMBInc , letterDB . True enabled. False disabled.

Return value code

Any non-zero value indicates an error.

0	Success
3	Parent group not found
4	Duplicate name; a client exists with the same name in the target parent group.

Result set

The result set contains zero or one record.

Field name/ ordinal number	Type	Description
0	Integer	0 the new group is created successfully. Try to read the value of the field 1 only if this field value is 0. Nonzero error. Do not read the value of the field 1 in the case.
1	Integer	ID of the new client. Try to read this value only if the value of the field 0 has a value of 0.

IConsole_GroupGetInfo_300

Returns one record containing information on the specified group.

Arguments

Name	Type	Description
Gid	Integer	ID of the group.

Return value code

0	Success
nonzero	error

Result set

The result set contains zero or one record containing the following information:

Name	Type	Inheritance	Value
ID	Integer	NA	ID of the group.
Name	String	NA	Short name of the group. May be up to 50 Unicode symbols.
ParentGID	Integer	NA	Numeric ID of the parent group.
HName	String	NA	Group hierarchical name.
CreatedAt	Date	NA	Group creation date.
Comments	String	NA	Custom comments.
FullProtection	Boolean	isInhFullProtection	State of the client protection mode. True full protection mode. False user document protection mode.
isInhFullProtection	Boolean	NA	Inheritance flag for FullProtection. True enabled. False disabled.
DriveMask	Integer	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer. The lowest bit represents the volume A:
isInhDriveMask	Boolean	NA	Inheritance flag for DriveMask. True enabled. False disabled. Must have the same value as isInhFullProtection .

MacroIncludes	Integer	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. 1 means the macro type is on or selected. See "MacroIncludes" on page 55.
isInhMacroIncludes	Boolean	NA	Inheritance flag for MacroIncludes. True enabled. False disabled.
IncludeMasks	String	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the " " character.
isInhIncludeMasks	Boolean	NA	Inheritance flag for IncludeMasks. True enabled. False disabled. Must have the same value as isInhMacroIncludes .
MacroExcludes	Integer	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. 1 means the appropriate macro type is on or selected. See "MacroExcludes" on page 56.
isInhMacroExcludes	Boolean	NA	Inheritance flag for MacroExcludes True enabled. False disabled.
ExcludeMasks	String	isInhExcludeMasks	Consists of substrings, each of which represents one Discardable mask. Substrings are delimited by the " " character.
isInhExcludeMasks	Boolean	NA	Inheritance flag for ExcludeMasks. True enabled. False disabled. Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	isInhArchiveConnection	Numeric ID of a connection to LiveArchive server.
DiscardData	Boolean	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchive Server during archiving.
isInhArchiveConnection	Boolean	NA	Inheritance flag for ArchiveConnection and DiscardData. True enabled. False disabled.

age_isEnabled	Boolean	age_isInh	True DataAging is enabled. False DataAging disabled.
age_daysKeepVersion	Double	age_isInh	Continuous protection window (in days).
age_daysKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per day (in days).
age_weeksKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per week (in weeks).
age_monthsKeepCP	Integer	age_isInh	The period to keep at least one checkpoint per month (in months).
age_isInh	Boolean	NA	Inheritance flag for age_isEnabled age_daysKeepVersion age_daysKeepCP age_weeksKeepCP age_monthsKeepCP True enabled. False disabled
FeatureLockdownID	Integer	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group: 0 no rights 1 "User" rights 2 "Power User" rights 3 "Super User" rights
isInhFeatureLockdownID	Boolean	NA	Inheritance flag for FeatureLockdownID . True enabled. False disabled.
DateExpiration	Date	isInhDateExpiration	Client expiration date. Null the client will never expire.
isInhDateExpiration	Boolean	NA	Inheritance flag for DateExpiration . True enabled. False disabled.
AutoCreate	Boolean	isInhAutoCreate	True Clients in this group may be created automatically. False Deny auto-creation requests to this group.
AutoCreateMode	Integer	isInhAutoCreate	1 Client will be activated at specified time. 2 Client will be activated after specified time. Any other value Client will not be activated.
AutoCreateDate	Date	isInhAutoCreate	If AutoCreate mode is 1 Then this is the specific time when client will be activated. 2 Then this is the time period after which client will be activated.

isInhAutoCreate	Boolean	NA	Inheritance flag for AutoCreate AutoCreateMode AutoCreateDate True enabled. False disabled.
sizeMBStart	Double	size_isInh	The initial size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBMax	Double	size_isInh	The maximum size of the local storage in MB. Null This value is to be inherited from the parent group.
sizeMBInc	Double	size_isInh	The growth increment of the local storage in MB. Null This value is to be inherited from the parent group.
pathDB	String	size_isInh	The path to the local storage files.
size_isInh	Boolean	NA	Inheritance flag for sizeMBStart sizeMBMax sizeMBInc pathDB True enabled. False disabled.

IConsole_GroupList

Returns a result set that contains a list of groups that are children of the specified parent group.

Arguments

Name	Type	Description
pgid	Integer	Parent group ID (Root group is always ID = 0).

Result set

Contains one record per a group.

Field name/ ordinal number	Type	Description
ID	Integer	Group ID.
Name	String	Group name.
AutoCreate	Boolean	True clients in this group may be created automatically. False any other condition.
Comments	String	Group comments
nChildren	Integer	Number of subgroups within this group.
nClients	Integer	Number of clients within this group.

IConsole_GroupSetInfo_300

Updates group attributes. Argument names correspond to attribute names. An attribute value may have a null value only if specifically noted.

Notes on inheritance

If an argument of this function has its inheritance flag, then

- If both the argument and its inheritance flag argument are *null*, then the new value of the attribute and its inheritance flag value are not changed.
- If the argument is *null* and its inheritance flag parameter is *true*, then the new value of the attribute is inherited from the parent group and new value of the inheritance flag is *true*.
- If the argument is *null* and its inheritance flag is *false*, then the new value of the attribute is set to *null*, if allowed. Otherwise, an error occurs. The new value of the inheritance flag is *false*.
- If the argument is *not null* and its inheritance flag argument is *null*, then the new value of the attribute depends on the current value of the inheritance flag. If it is *true*, then the attribute value is not changed; otherwise, the new attribute value is set to the argument value. The inheritance flag value is not changed in both cases.
- If the argument is *not null*, and its inheritance flag argument is *true*, then the new value of the attribute is inherited from the parent group and the new value of the inheritance flag is *true*.
- If the argument is *not null* and its inheritance flag is *false*, then the new value of the attribute is set to the argument value. The new value of the inheritance flag is *false*.

If an argument does not have its inheritance flag then:

- If the argument is *not null*, then the new value of the attribute is set to the argument value.
- If the argument is *null*, then the attribute value is not changed.

Arguments

Name	Type	Def.	Inheritance	Value
Gid	Integer	NA	NA	ID of a group.
Name	String	Null	NA	New short name of the group. May be up to 50 Unicode symbols. Null no changes.
ParentGID	Integer	Null	NA	New parent group identifier. Null no changes. This parameter is used to move the client from one group to another. Note that changing the group may result in changing inheritable parameters.
Comments	String	Null	NA	New custom comments. Null no changes.
FullProtection	Boolean	Null	isInhFullProtection	New state of the client protection mode. True full protection mode. False user document protection mode.
isInhFullProtection	Boolean	Null	NA	Inheritance flag for FullProtection. True enabled. False disabled.
DriveMask	Integer	Null	isInhDriveMask	Each non-zero bit of this binary value represents a protected logical volume on the client's computer. The lowest bit represents the volume A:
isInhDriveMask	Boolean	Null	NA	Inheritance flag for DriveMask. True enabled. False disabled. Must have the same value as isInhFullProtection .
MacroIncludes	Integer	Null	isInhMacroIncludes	Each bit of this binary value represents one predefined macro type for User Documents. 1 means the macro type is on or selected. See "MacroIncludes" on page 55.

isInhMacroIncludes	Boolean	Null	NA	Inheritance flag for MacroIncludes. True enabled. False disabled.
IncludeMasks	String	Null	isInhIncludeMasks	Consists of substrings, each of which represents one User Document mask. Substrings are delimited by the " " character.
isInhIncludeMasks	Boolean	Null	NA	Inheritance flag for IncludeMasks. True enabled. False disabled. Must have the same value as isInhMacroIncludes .
MacroExcludes	Integer	Null	isInhMacroExcludes	Each bit of this binary value represents one predefined macro type for Discardable Data. 1 means the appropriate macro type is on or selected. See "MacroExcludes" on page 56.
isInhMacroExcludes	Boolean	Null	NA	Inheritance flag for MacroExcludes True enabled. False disabled.
ExcludeMasks	String	Null	isInhExcludeMasks	Consists of substrings, each of which represents one Discardable mask. Substrings are delimited by the " " character.
isInhExcludeMasks	Boolean	Null	NA	Inheritance flag for ExcludeMasks. True enabled. False disabled. Must have the same value as isInhMacroExcludes .
ArchiveConnection	Integer	Null	isInhArchiveConnection	Numeric ID of a connection to LiveArchive server.
DiscardData	Boolean	Null	isInhArchiveConnection	True Older versions will be deleted during archiving. False Older versions will be moved to LiveArchive Server during archiving.

isInhArchiveConnection	Boolean	Null	NA	Inheritance flag for ArchiveConnection and DiscardData. True enabled. False disabled.
age_isEnabled	Boolean	Null	age_isInh	True DataAging is enabled. False DataAging is disabled.
age_daysKeepVersion	Double	Null	age_isInh	Continuous protection window (in days).
age_daysKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per day (in days).
age_weeksKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per week (in weeks).
age_monthsKeepCP	Integer	Null	age_isInh	The period to keep at least one checkpoint per month (in months).
age_isInh	Boolean	Null	NA	Inheritance flag for age_isEnabled age_daysKeepVersion age_daysKeepCP age_weeksKeepCP age_monthsKeepCP True enabled. False disabled
FeatureLockdownID	Integer	Null	isInhFeatureLockdownID	Defines the default Feature Lockdown level for the client/group: 0 no rights 1 "User" rights 2 "Power User" rights 3 "Super User" rights
isInhFeatureLockdownID	Boolean	Null	NA	Inheritance flag for FeatureLockdownID . True enabled. False disabled.
DateExpiration	Date	Null	isInhDateExpiration	Client expiration date. Null the client will never expire.
isInhDateExpiration	Boolean	Null	NA	Inheritance flag for DateExpiration . True enabled. False disabled.
AutoCreate	Boolean	Null	isInhAutoCreate	True Clients in this group may be created automatically. False Deny auto-creation requests to this group.

AutoCreateMode	Integer	Null	isInhAutoCreate	<p>1 Client will be activated at specified time.</p> <p>2 Client will be activated after specified time.</p> <p>Any other value Client will not be activated.</p>
AutoCreateDate	Date	Null	isInhAutoCreate	<p>If AutoCreate mode is</p> <p>1 Then this is the specific time when client will be activated.</p> <p>2 Then this is the time period after which client will be activated.</p>
isInhAutoCreate	Boolean	Null	NA	<p>Inheritance flag for AutoCreate, AutoCreateMode, AutoCreateDate.</p> <p>True enabled.</p> <p>False disabled.</p>
sizeMBStart	Float	Null	size_isInh	<p>The initial size of the local storage in MB.</p> <p>Null This value is to be inherited from the parent group.</p>
sizeMBMax	Float	Null	size_isInh	<p>The maximum size of the local storage in MB.</p> <p>Null This value is to be inherited from the parent group.</p>
sizeMBInc	Float	Null	size_isInh	<p>The growth increment of the local storage in MB.</p> <p>Null This value is to be inherited from the parent group.</p>
letterDB	String	Null	size_isInh	<p>Disk logical name ("C", "D", ...), where the local storage is to be located.</p> <p>Null This value is to be inherited from the parent group.</p>
size_isInh	Boolean	True	Null	<p>Inheritance flag for sizeMBStart, sizeMBMax, sizeMBInc, letterDB.</p> <p>True enabled.</p> <p>False disabled.</p>

Return value code

Any non-zero value indicates an error.

0	Success
1	The client account is not found.
3	Parent group not found.
4	Duplicate name; a client exists with the same name in the target parent group.

IConsole_ReportClientsActivity

Returns a result set containing information on activity of the specified client.

Arguments

Name	Type	Description
Type	Integer	0 all clients. 1 clients belonging to the group specified by its ID in the argument Id . 2 a client specified by its ID in argument Id .
Id	Integer	ID of a client or group on which to generate a report.

Return value code

0	Success
nonzero	Error

Result set

Contains one record per client.

Field name/ ordinal number	Type	Description
Client_ID	Integer	Client ID.
Client_Name	String	Short name of the client.
Client_Group	String	Compound name of the group to which the client belongs.
Client_DB_Size	Integer	Size of the client databases, including log files, in pages. (128 pages=1 MB)
Last_User	String	Last known logon name of a user of the protected computer.

Bit descriptions for macros

The following tables describe the bits that may be used to define a value for the arguments MacroIncludes (User Documents) and MacroExcludes (Discardable Data).

MacroIncludes

The following are bits that can be used in **MacroIncludes** (User Documents):

Name of the Macro type	Bit (hexadecimal)
My Documents directory	0x00000008
Start Menu Files	0x00000010
Microsoft Office Documents	0x00000400
Streaming Audio/Video Files	0x00000800
E-Mail Inboxes	0x00001000
Graphics Files	0x00002000
Application Development Files	0x00004000
Compressed Files	0x00008000
Text Documents	0x00040000

MacroExcludes

The following are bits that can be used in **MacroExcludes** (Discardable Data):

Name of the Macro type	Bit (hexadecimal)
Internal discardable data (must be set)	0x00000001
Local temporary directories	0x00000040
Recycle bin directories	0x00000100
Temporary internet directories	0x00000080
Temporary download directories	0x00000200
Microsoft System Restore Points	0x00080000
Microsoft Office Documents	0x00000400
Streaming Audio/Video Files	0x00000800
E-Mail Inboxes	0x00001000
Graphics Files	0x00002000
Application Development Files	0x00004000
Compressed Files	0x00008000
Text Documents	0x00040000

Sample code

Below is a an example of using the IConsole_ClientList function to return a list of all clients on the specified Live Backup Server.

```

Dim rmg
set rmg = CreateObject("RepositoryManager.Generic")
    rmg.ServerName = nameServer.value
    rmg.MakeFunction( "IConsole_ClientList")
    rmg.AddInputInteger null      'get a list of all clients

dim valueReturn, nRecords
on error resume next          'check for errors
valueReturn = rmg.Execute() 'execute and get return value

if Err.number <> 0 then
    msgbox "Could not connect to the specified server. " &
        err.Description
end if
on error goto 0

if valueReturn = 0 then      'nonzero means failure
    Dim oOption
    while not rmg.EOF        'check for more records
        set oOption = document.createElement("OPTION")'create an HTML object to add
        oOption.text=rmg.GetFieldValue("Name") + " (ID="  +Cstr(rmg.GetFieldValue("ID"))
+ ")"      'Field "Name" contains name of a client
        oOption.value=rmg.GetFieldValue("ID") 'Field "ID" contains id of a client
        listClient.add oOption          'Add the filled HTML object to the list
        rmg.MoveNext                    'move to the next record
    wend

else
    msgbox "The server could not execute the function requested. Return code value="
& valueReturn
end if

```

You can find the more sample code for review in the MANAGEMENT API subfolder of the Live Backup Server program folder.

HTA file name	Description
CreateClient.hta	Demonstrates usage of the IConsole_ClientCreate_292 function to create a new client.
RenameClient.hta	Demonstrates usage of the IConsole_ClientRename_262 function to rename existing client.
GetandSetClientProperties.hta	Demonstrates usage of the IConsole_ClientGetInfo_292 and IConsole_ClientSetInfo_292 function to show the properties of the client and change the “comment” and “expiration date” parameters.
DeleteClient.hta	Demonstrates usage of the IConsole_ClientDelete function to delete existing client.
GetGroupList.hta	Demonstrates usage of the IConsole_GroupList function to display the list of sub-groups.
GetClientList.hta	Demonstrates usage of the IConsole_ClientList function to display the list of clients.

CHAPTER 4

A large, bold, black number '4' is centered within a white square box with a thin black border. The box is set against a light gray background.

Metering functions

The following metering functions can be invoked via the `RepositoryManager.Generic` object:

- **`IReport_DataProtected`**: Reports on the protected data per client computer or group.,
- **`IReport_SpaceConsumption`**: Reports on the storage capacity used per client computer or group.
- **`IReport_ClientsActivity`**: Reports on the number of recovery operations per client computer or group
- **`IReport_Billing`**: Returns information on Current protected data, Total protected data, and Archived protected data.

IReport_DataProtected

Returns one result set containing information on the size of protected, used, and reserved data of the specified clients. This procedure returns information on actual data only; no cached data is reported.

Arguments

Name	Type	Default	Description
@type	Integer	NA	0 all clients. 1 clients belonging to the group specified by the parameter @id , as well as any client belonging to a subgroup of this group. 2 a client specified by the parameter @id in. Any other value error.
@id	Integer	NA	Depends on the value of @type . If @type=0 Then all clients. The value will be ignored. @type=1 ID of a group. @type=2 ID of a client.

Return value code

0	Success
nonzero	Error

Result set

Contains one record per client.

Field name/ ordinal number	Type	Description
ID /0	Integer	Client ID.
nameClient /1	String	Short name of the client.
nameGroup /2	String	Compound name of the group to which the client belongs.
sizeLocalProtectedMB /3	Float	The total size of files that are stored in the client local storage and can be restored for this client. In MB.
sizeSharedProtectedMB /4	Float	The total size of files that are stored in the shared storage and can be restored for the client. In MB.
sizeLocalReservedMB /5	Float	The size of the client local storage. In MB.
sizeSharedReservedMB /6	Float	The size of the shared storage that is associated with the client. In MB.
sizeLocalUsedMB /7	Float	The used space in the client local storage. In MB.
sizeSharedUsedMB /8	Float	The same value as sizeSharedReservedMB .
codeError /9	Integer	0 the information on the client has been collected and reported accurately without error. nonzero An error occurred during data collection. The information reported may not be correct and may be <i>Null</i> .

IReport_SpaceConsumption

Returns one result set containing info on disk space used by the clients specified.

Arguments

Name	Type	Default	Description
@type	Integer	NA	0 all clients plus the shared database. 1 clients belonging to the group specified by the parameter @id, as well as any client belonging to a subgroup of this group. 2 a client specified by the parameter @id in. Any other value error.
@id	Integer	NA	Depends on the value of @type. If @type=0 Then all clients. The value will be ignored. @type=1 ID of a group. @type=2 ID of a client.

Return value code

0	Success
nonzero	Error

Result set

Contains one record per day that Live Backup Server has been installed.

Field name/ ordinal number	Type	Description
onDay /0	Date	The date and time reported on; one record per day. The first record represents the current date and time. The second record represents the beginning of the current day. The third record represents yesterday. Each subsequent record represents the previous day, continuing until the day Live Backup Server was installed. Date and time are in the server's time zone.
sizeDataReservedMB /1	Float	Size is the sum of all clients' local storage. In MB. Size is the sum of used space in all clients local storage. If @type=0, then the size of the LBSsystem and LBShared storage are also included.
sizeLogReserved /2	Float	Size is the sum of the log files of all clients' local storage. In MB. If @type=0, then the size of the LBSsystem and LBShared storage are also included.
sizeDataUsedMB /3	Float	Size is the sum of used space in all clients' local storage. If @type=0, then size of LBSsystem and LBShared storage are included.

IReport_ClientsActivity

Returns one result set containing info on client activity of the clients specified.

Arguments

Name	Type	Default	Description
@type	Integer	NA	0 all clients. 1 clients belonging to the group specified by the parameter @id, as well as any client belonging to a subgroup of this group. 2 a client specified by the parameter @id in. Any other value error.
@id	Integer	NA	Depends on the value of @type. If @type=0 Then all clients. The value will be ignored. @type=1 ID of a group. @type=2 ID of a client.

Return value code

0	Success
nonzero	Error

Result set

Contains one record per a client.

Field name/ ordinal number	Type	Description
ID /0	Integer	Client ID.
nameClient /1	String	Short name of the client.
nameGroup /2	String	Compound name of the group to which the client belongs.
sizeDataReservedMB /3	Float	The size of the local storage. In MB.
sizeLogReservedMB /4	Float	The log size of the local storage. In MB.
sizeDataUsedMB /5	Float	The used space in the local storage. In MB.

LB_Login / 6	String	Last known login to the client computer.
utcLastVersionPut / 7	Date	The universal date and time when the last client version was delivered to the server. (Greenwich Mean Time)
utcLastCheckpointPut / 8	Date	The universal date and time when the last client checkpoint was delivered to the server. (Greenwich Mean Time)
LB_Ver0 / 9	Integer	Last known major version number of Live Backup Client.
LB_Ver1 / 10	Integer	Last known minor version number of Live Backup Client.
LB_Ver2 / 11	Integer	Last known build number of Live Backup Client
LB_Ver3 / 12	Integer	Last known revision number of Live Backup Client.
isTransportEncryption / 13	Boolean	Last known state of transport encryption for the Live Backup Client.
maskUsedTransportCipher / 14	Integer	Last known cipher used in transport by Live Backup Client.
FileRecovery / 15	Integer	Total number of file recoveries performed on this client.
RollBack / 16	Integer	Total number of System Rollbacks performed on this client
ImageGenerated / 17	Integer	Total number of Disaster Recovery images generated for this client.
utcLastVersionCreated / 18	Date	The universal date and time when the last client version was created on by Live Backup Client. (Greenwich Mean Time)
utcLastCheckpointCreated / 19	Date	The universal date and time when the last checkpoint was created by Live Backup Client. (Greenwich Mean Time)
utcLastSuccessClientCall / 20	Date	The universal date and time when the last successful client request was registered. (Greenwich Mean Time)
utcLastClientCall /21	Date	The universal date and time when the last client request was registered. (Greenwich Mean Time)

utcActivation / 22	Date	The universal date and time when the account will be or was activated. (Greenwich Mean Time)
LB_ComputerName / 23	String	Last known client computer name
DateExpiration / 24	Date	The date when the client account will expire. The date is based on Live Backup Server's local date and time. <i>Null</i> means the client will never expire.
isExpired / 25	Boolean	True client has expired. False client has not expired.

IReport_Billing

Returns information on Current protected data, Total protected data, and Archived protected data.

Arguments

Name	Type	Default	Description
@type	Integer	NA	0 all clients. 1 clients belonging to the group specified by the parameter @id, as well as any client belonging to a subgroup of this group. 2 a client specified by the parameter @id in. Any other value error.
@id	Integer	NA	Depends on the value of @type. If @type=0 Then all clients. The value will be ignored. @type=1 ID of a group. @type=2 ID of a client.

Return value code

0	Success
nonzero	Error

Result set

Contains one record per client.

Field name/ ordinal number	Type	Description
ID /0	Integer	Client ID.
name /1	String	Short name of the client.
nameH /2	String	Compound name of the group to which the client belongs.
/ 3	String	The server name.
sizeProtectedMB /4	Float	The sum of the current (last known) sizes of all existing protected files on the client computer. In MB.
sizeProtectedWHistoryMB /5	Float	The current protected data plus the history of every protected file (includes deleted files). Each version in the history is counted as a separate file. In MB.
sizeArchivedMB /6	Float	The portion of the total protected data that has been moved to the archive server. In MB.

Sample code

Below is an example of using the IReport_ClientsActivity function to return a list of all clients on the specified Live Backup Server.

```

dim idtype, objid
idtype = 0
objid = 0

sub buttonStart_onclick()

    select case idtype
    case 0
        objid=0
    case 1
        objid=inpGroupID.value
    case 2
        objid=inpClientID.value
    end select

    Dim rmg
    set rmg = CreateObject("RepositoryManager.Generic") 'creates object
    if len(nameServer.value) > 0 then'if server name is not specified, then the object
will use its default value (local).
        rmg.ServerName = nameServer.value'set the server name
    end if
    rmg.MakeFunction( "IReport_ClientsActivity") 'set the function name

    rmg.AddInputInteger idtype'add an integer argument
    rmg.AddInputInteger objid'add an integer argument

    dim valueReturn, nRecords

    on error resume next' check for possible errors
    valueReturn = rmg.Execute()' execute the sp and get the return value
    if Err.number <> 0 then
        msgbox "Could not connect to the server specified. " & err.Description
        exit sub
    end if
    on error goto 0

    if valueReturn = 0 then'nonzero means that the sp failed
        dim strOut
        strOut = "<table border=1><tr><th>ID</th><th>Client name</th><th>Group name</
th><th>Last Version Put (UTC)</th>" _

```

```
    & "<th>Last Checkpoint Put (UTC)</th><th>Transport is encrypted)</
th><th>Total number of file recovery operations</th>" _
    & "<th>The server local date when the client expires</th><th>Client has
expired</th></tr>"

    while not rmfg.EOF'check if more records are available
    strOut = strOut & "<tr><td>" & rmfg.GetFieldValue("ID") & "</td><td>" _
        & rmfg.GetFieldValue("nameClient") & "</td><td>" _
        & rmfg.GetFieldValue("nameGroup") & "</td><td>" _
        & rmfg.GetFieldValue("utcLastVersionPut") & "</td><td>" _
        & rmfg.GetFieldValue("utcLastCheckpointPut") & "</td><td>" _
        & rmfg.GetFieldValue("isTransportEncryption") & "</td><td>" _
        & rmfg.GetFieldValue("FileRecovery") & "</td><td>" _
        & rmfg.GetFieldValue("DateExpiration") & "</td><td>" _
        & rmfg.GetFieldValue("isExpired") & "</td></tr>"

    rmfg.MoveNext' move to the next record
    wend
    strOut = strOut & "</table>"
    outData.innerHTML = strOut
else
    msgbox "The server could not execute the function requested. Return code value="
& valueReturn
end if

end sub

sub disable_IDs()
    idtype = 0
    inpGroupID.disabled=true
    inpClientID.disabled=true
end sub

sub enable_GroupID()
    idtype = 1
    inpGroupID.disabled=false
    inpClientID.disabled=true
end sub

sub enable_ClientID()
    idtype = 2
    inpGroupID.disabled=true
    inpClientID.disabled=false
end sub

/-->
</SCRIPT>
</HEAD>
<BODY>
```

```
<h1>How to use RepositoryManager object</h1>
<h2><SPAN lang=EN-US
style="FONT-SIZE: 12pt; FONT-FAMILY: 'Times New Roman'; mso-fareast-font-family:
'Times New Roman'; mso-ansi-language: EN-US; mso-fareast-language: EN-US; mso-bidi-
language: AR-SA"><FONT
size=4>Getting info on client activity of the clients specified</FONT></SPAN> </h2>
<P><STRONG>server name: </STRONG><INPUT id=nameServer>&nbsp;<FONT size=1>(left blank
to connect to
default <FONT size=2>(local)</FONT> server)</FONT>
</P>

<P>
<INPUT id=radioAll type=radio name=radioType onclick='disable_IDs'
CHECKED><LABEL>all the clients </LABEL> <br>

<INPUT id=radioGrp type=radio name=radioType onclick='enable_GroupID'> <label>ID of
the group</label>
<INPUT id=inpGroupID style="WIDTH: 48px; HEIGHT: 22px" size=2 value=1 name=inpGroupID
disabled> &nbsp;<FONT size=1>(only digits)</FONT>
<br>

<INPUT id=radioCln type=radio name=radioType onclick='enable_ClientID'> <label>ID of
the client</label>&nbsp;<br>
<INPUT id=inpClientID style="WIDTH: 48px; HEIGHT: 22px" size=2 value=1
name=inpClientID disabled> &nbsp;<FONT size=1>(only digits)</FONT>
</P>

<P><INPUT id=buttonStart type=button value="Get" name='buttonStart"' style="WIDTH:
158px; HEIGHT: 24px" size=95></P>
<br>
<br>

<div id='outData'>
</div>
```

You can find the more sample code for review in the MANAGEMENT API subfolder of the Live Backup Server program folder.

HTA file name	Description
IReport_ClientsActivity.hta	Demonstrates usage of the Report_ClientsActivity function to generate a report on clients activity.
IReport_DataProtected.hta	Demonstrates usage of the Report_DataProtected function to report on the size of protected, used, and reserved data of the specified clients.
IReport_SpaceConsumption.hta	Demonstrates usage of the Report_SpaceConsumption function to report on the disk space used by the specified clients.