Package 'notebookutils'

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Title Dummy R APIs Used in 'Azure Synapse Analytics' for Local Developments

Version 1.6.2

Description
This is a pure dummy interfaces package which mirrors 'MsSparkUtils' APIs <https://learn.microsoft.com/en-us/azure/synapse-analytics/spark/microsoft-spark-utilities?pivots=programming-language-r> of 'Azure Synapse Analytics' <https://learn.microsoft.com/en-us/azure/synapse-analytics/> for R users, customer of Azure Synapse can download this package from CRAN for local development.

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VignetteBuilder knitr

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NeedsCompilation no

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Contents

`display` *Set the dataframe info which needs to be visualized.*

Description

Set the dataframe info which needs to be visualized.

Usage

```
display(dataFrame, isSummary = FALSE)
```

Arguments

dataFrame	the dataframe that needs to be visualized.
isSummary	whether show summary info of the dataframe.

Value

No return value, show the first part of passed dataFrame.

Examples

```
data <- list(56,78,90,45,67)
df <- data.frame(t(sapply(data,c)))
display(df)
display(df, TRUE)
```

---

display.config *Set the chart config metadata for current dataframe (set by* display*) which needs to be visualized.*

Description

Set the chart config metadata for current dataframe (set by display) which needs to be visualized.

Usage

```
display.config(
  commId,
  lastCommId = NULL,
  binsNumber = 10,
  category = "table",
  keys = NULL,
  values = NULL,
  series = NULL,
  aggregation = NULL,
  column = NULL
)
```

Arguments

commId	the id used to identify whether the API call from synapse notebook js client.
lastCommId	same with id parameter, but the previous value.
binsNumber	bins number for rendering histogram, default is 10.
category	the chart category as bar, line, default is table.
keys	the column names which useds to render x-axis.
values	the column names which used to render y-axis.

series	the column which used to render the chart series
aggregation	the aggregation operation type: sum, avg, min, max, count.
column	will deperated: the column name used to calculate the statistic info, as the column type, unique values, missing values, etc.

`display.configCustomOptions` *Set the visualizer custom options related to the current dataframe, it will be consumed when executing* `display`.

Description

Set the visualizer custom options related to the current dataframe, it will be consumed when executing `display`.

Usage

```
display.configCustomOptions(options)
```

Arguments

options	custom options serialized from JSON format

`displayHTML` *Construct an specific html fragment to synapse notebook front-end for rendering based on user-input html content.*

Description

Construct an specific html fragment to synapse notebook front-end for rendering based on user-input html content.

Usage

```
displayHTML(content)
```

Arguments

content	html content which user want to render

Value

No return value, print the `content` to mimic the render behavior when used in azure synapse runtime.

Examples

```
displayHTML('<b>Hello world!</b>')
```

mssparkutils.credentials.getConnectionStringOrCreds

Take linked service name as input and return connection string or credentials depending on the configuration of the linked service.

Description

Take linked service name as input and return connection string or credentials depending on the configuration of the linked service.

Usage

```
mssparkutils.credentials.getConnectionStringOrCreds(linkedService)
```

Arguments

`linkedService`	Linked service name.

Value

A empty string used to mimic credentials returned by azure synapse runtime for `linkedService`.

Examples

```
mssparkutils.credentials.getConnectionStringOrCreds('AzureDataLakeStorage1')
```

mssparkutils.credentials.getFullConnectionString

Take linked service name as input and return full connection string with credentials.

Description

Take linked service name as input and return full connection string with credentials.

Usage

```
mssparkutils.credentials.getFullConnectionString(linkedService)
```

Arguments

`linkedService`	Linked service name.

Value

A empty string used to mimic connection string returned by azure synapse runtime for `linkedService`.

Examples

```
mssparkutils.credentials.getConnectionStringOrCreds('AzureDataLakeStorage1')
```

---

mssparkutils.credentials.getPropertiesAll

Return all the properties of a given linked service in string format.

Description

Return all the properties of a given linked service in string format.

Usage

```
mssparkutils.credentials.getPropertiesAll(linkedService)
```

Arguments

linkedService	Linked service name.

Value

A empty string used to mimic properties string returned by azure synapse runtime for `linkedService`.

Examples

```
mssparkutils.credentials.getPropertiesAll('AzureDataLakeStorage1')
```

---

mssparkutils.credentials.getSecret

Return AKV secret.

Description

Return AKV secret.

Usage

```
mssparkutils.credentials.getSecret(akvName, secret, linkedService = NULL)
```

Arguments

akvName	Azure Key Vault name.
secret	name of the secret being fetched.
linkedService	linkedService name of the AKV linked service.

Value

A empty string used to mimic secret returned by azure synapse runtime for given `akvName` and `secret`.

Examples

```
mssparkutils.credentials.getSecret('akvName', 'secretName')
mssparkutils.credentials.getSecret('akvName', 'secretName', 'AzureDataLakeStorage1')
```

`mssparkutils.credentials.getSecretWithLS`

Return AKV secret using linkedService.

Description

Return AKV secret using linkedService.

Usage

```
mssparkutils.credentials.getSecretWithLS(linkedService, secret)
```

Arguments

`linkedService`	linkedService name of the AKV linked service.
`secret`	name of the secret being fetched.

Value

A empty string used to mimic secret returned by azure synapse runtime for given `linkedService` and `secret`.

Examples

```
mssparkutils.credentials.getSecretWithLS('AzureDataLakeStorage1', 'secretName')
```

`mssparkutils.credentials.getToken`
Get AAD token for a resource.

Description

Get AAD token for a resource.

Usage

```
mssparkutils.credentials.getToken(audience, name = "")
```

Arguments

`audience`	token audience.
`name`	token audience.

Value

A empty string used to mimic token returned by azure synapse runtime for accessing resource `audience`.

Examples

```
mssparkutils.credentials.getToken('synapse')
mssparkutils.credentials.getToken('storage')
mssparkutils.credentials.getToken('storage', 'storage')
```

`mssparkutils.credentials.help`
Get help message.

Description

Get help message.

Usage

```
mssparkutils.credentials.help()
```

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils credentials module when used in azure synapse runtime.

Examples

```
mssparkutils.credentials.help()
```

`mssparkutils.credentials.isValidToken`
Returns true if the input token is valid (i.e, hasn't expired).

Description

Returns true if the input token is valid (i.e, hasn't expired).

Usage

```
mssparkutils.credentials.isValidToken(token)
```

Arguments

`token`	token to validate.

Value

FALSE to mimic the result if `token` is invalid.

Examples

```
mssparkutils.credentials.isValidToken('dummyToken')
```

`mssparkutils.credentials.putSecret`
Put AKV secret using with or without linkedService.

Description

Put AKV secret using with or without linkedService.

Usage

```
mssparkutils.credentials.putSecret(
  akvName,
  secretName,
  secretValue,
  linkedService = NULL
)
```

Arguments

akvName	Azure Key Vault name.
secretName	name of the secret being written.
secretValue	value of the secret being written.
linkedService	name of the AKV linked service.

Value

The secretValue been written.

Examples

```
mssparkutils.credentials.putSecret('akvName', 'secretName', 'secretValue')
mssparkutils.credentials.putSecret('akvName', 'secretName', 'secretValue', 'AzureDataLakeStorage1')
```

---

mssparkutils.credentials.putSecretWithLS

Put AKV secret using linkedService.

Description

Put AKV secret using linkedService.

Usage

```
mssparkutils.credentials.putSecretWithLS(
  linkedService,
  secretName,
  secretValue
)
```

Arguments

linkedService	name of AKV linked service.
secretName	name of the secret being written.
secretValue	value of the secret being written.

Value

The secretValue been written.

Examples

```
mssparkutils.credentials.putSecretWithLS('AzureDataLakeStorage1', 'secretName', 'secretValue')
```

mssparkutils.env.getClusterId

Get cluster id.

Description

Get cluster id.

Usage

```
mssparkutils.env.getClusterId()
```

Value

A empty string used to mimic cluster id of azure synapse runtime.

Examples

```
mssparkutils.env.getClusterId()
```

mssparkutils.env.getJobId

Get job Id.

Description

Get job Id.

Usage

```
mssparkutils.env.getJobId()
```

Value

A empty string used to mimic the id of spark job been submitted to azure synapse runtime.

Examples

```
mssparkutils.env.getJobId()
```

mssparkutils.env.getPoolName
Get pool name.

Description

Get pool name.

Usage

```
mssparkutils.env.getPoolName()
```

Value

A empty string used to mimic the name of user's azure synapse spark pool.

Examples

```
mssparkutils.env.getPoolName()
```

mssparkutils.env.getUserId
Get user Id.

Description

Get user Id.

Usage

```
mssparkutils.env.getUserId()
```

Value

A empty string used to mimic the id of user.

Examples

```
mssparkutils.env.getUserId()
```

mssparkutils.env.getUserName

Get user name.

Description

Get user name.

Usage

```
mssparkutils.env.getUserName()
```

Value

A empty string used to mimic the name of user.

Examples

```
mssparkutils.env.getUserName()
```

mssparkutils.env.getWorkspaceName

Get workspace name.

Description

Get workspace name.

Usage

```
mssparkutils.env.getWorkspaceName()
```

Value

A empty string used to mimic the id of the user's azure synapse workspace.

Examples

```
mssparkutils.env.getWorkspaceName()
```

`mssparkutils.env.help` *Get help message.*

Description

Get help message.

Usage

```
mssparkutils.env.help()
```

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils env module when used in azure synapse runtime.

Examples

```
mssparkutils.env.help()
```

`mssparkutils.fs.append`
Append the given String to a file, encoded in UTF-8.

Description

Append the given String to a file, encoded in UTF-8.

Usage

```
mssparkutils.fs.append(file, content, createFileIfNotExists = FALSE)
```

Arguments

`file`	FileSystem URI
`content`	Content needs to be append to file, encoded in System default charset.
`createFileIfNotExists`	If set to true, will firstly try to create file if not exists.

Value

FALSE to mimic the result if `file` content append fail.

Examples

```
mssparkutils.fs.append("/tmp/my-file", "Hello world!")
mssparkutils.fs.append("/tmp/my-file", "Hello world!", TRUE)
```

---

mssparkutils.fs.cp *Copies a file or directory, possibly across FileSystems.*

Description

Copies a file or directory, possibly across FileSystems.

Usage

```
mssparkutils.fs.cp(from, to, recurse = FALSE)
```

Arguments

from	FileSystem URI of the source file or directory
to	FileSystem URI of the destination file or directory
recurse	if TRUE, all files and directories will be recursively copied

Value

FALSE to mimic the result if file or directory from fail to copy to to.

Examples

```
mssparkutils.fs.cp("/tmp/my-folder/a", "adls://xxx/tmp/b")
mssparkutils.fs.cp("/tmp/my-folder/a", "adls://xxx/tmp/b", TRUE)
```

---

mssparkutils.fs.exists *Check if a file or directory exists.*

Description

Check if a file or directory exists.

Usage

```
mssparkutils.fs.exists(file)
```

Arguments

file	FileSystem URI

Value

TRUE if the file or directory exists

Examples

```
## Not run:
mssparkutils.fs.exists("/tmp/my-file")

## End(Not run)
```

---

mssparkutils.fs.fastcp

Copies a file or directory via azcopy, possibly across FileSystems.

Description

Copies a file or directory via azcopy, possibly across FileSystems.

Usage

```
mssparkutils.fs.fastcp(from, to, recurse = TRUE, extraConfigs = NULL)
```

Arguments

from	FileSystem URI of the source file or directory
to	FileSystem URI of the destination file or directory
recurse	if TRUE, all files and directories will be recursively copied
extraConfigs	extra configs for azcopy, includes flags, timeout, aadToken, sourceLinkedService, destinationLinkedService

Value

TRUE if all files were successfully copied

Examples

```
## Not run:
mssparkutils.fs.fastcp("file:/tmp/my-folder/a", "adls://xxx/tmp/b")

## End(Not run)
```

`mssparkutils.fs.getMountPath` *Gets the local path of the mount point.*

Description

Gets the local path of the mount point.

Usage

```
mssparkutils.fs.getMountPath(mountPoint, scope = "")
```

Arguments

`mountPoint`	The directory that was previously mounted.
`scope`	Mount point level, job or workspace, default is job.

Value

Empty string to mimic the local mounted path related to `mountPoint`.

Examples

```
mssparkutils.fs.getMountPath("/mnt")
mssparkutils.fs.getMountPath("/mnt", " job")
```

`mssparkutils.fs.head` *Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8.*

Description

Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8.

Usage

```
mssparkutils.fs.head(file, maxBytes = 65535)
```

Arguments

`file`	FileSystem URI
`maxBytes`	Maximum number of bytes to read

Value

Empty string to mimic the returned content of `file`.

Examples

```
mssparkutils.fs.head("/tmp/my-folder/my-file")
mssparkutils.fs.head("/tmp/my-folder/my-file", 1000)
```

`mssparkutils.fs.help` *mssparkutils.fs provides utilities for working with various FileSystems.*

Description

Below is overview about the available methods:

Usage

```
mssparkutils.fs.help(methodName = "")
```

Arguments

`methodName`	method name to get more information.

Details

mssparkutils.fs.cp: Copies a file or directory, possibly across FileSystems mssparkutils.fs.mv: Moves a file or directory, possibly across FileSystems mssparkutils.fs.ls: Array -> Lists the contents of a directory mssparkutils.fs.mkdirs: Creates the given directory if it does not exist, also creating any necessary parent directories mssparkutils.fs.put: Writes the given String out to a file, encoded in UTF-8 mssparkutils.fs.head: Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8 mssparkutils.fs.append: Append the content to a file mssparkutils.fs.rm: Removes a file or directory

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils fs module when used in azure synapse runtime.

Examples

```
mssparkutils.fs.help()
mssparkutils.fs.help("ls")
```

mssparkutils.fs.ls *Lists the contents of a directory.*

Description

Lists the contents of a directory.

Usage

```
mssparkutils.fs.ls(dir)
```

Arguments

dir	FileSystem URI

Value

Empty list to mimic the file list under dir.

Examples

```
mssparkutils.fs.ls("/tmp/my-folder/")
```

mssparkutils.fs.mkdirs *Creates the given directory if it does not exist, also creating any necessary parent * directories.*

Description

Creates the given directory if it does not exist, also creating any necessary parent * directories.

Usage

```
mssparkutils.fs.mkdirs(dir)
```

Arguments

dir	FileSystem URI

Value

FALSE to mimic the result if dir creation fail.

Examples

```
mssparkutils.fs.mkdirs("/tmp/a/b/c")
```

mssparkutils.fs.mount *Attach remote storage (Blob, Gen2, Azure File Share) to all working nodes (driver node and worker nodes)*

Description

Attach remote storage (Blob, Gen2, Azure File Share) to all working nodes (driver node and worker nodes)

Usage

```
mssparkutils.fs.mount(source, mountPoint, extraConfigs = NULL)
```

Arguments

source	FileSystem URI that contains the source data.
mountPoint	The directory of remote source to mount the source.
extraConfigs	Extra configurations.

Value

FALSE to mimic the result if mountPoint creation fail.

Examples

```
mssparkutils.fs.mount("abfss://xxx.dfs.core.windows.net", "/mnt")
```

mssparkutils.fs.mounts *Show information about what is mounted. Any credentials used to mount the mount points listed will not be displayed.*

Description

Show information about what is mounted. Any credentials used to mount the mount points listed will not be displayed.

Usage

```
mssparkutils.fs.mounts(extraConfigs = NULL)
```

Arguments

extraConfigs	Extra configurations.

Value

The list of MountPointInfo.

`mssparkutils.fs.mountToDriverNode` *Attach remote storage (Blob, Gen2, Azure File Share) to driver node*

Description

Attach remote storage (Blob, Gen2, Azure File Share) to driver node

Usage

```
mssparkutils.fs.mountToDriverNode(source, mountPoint, extraConfigs = NULL)
```

Arguments

`source`	FileSystem URI that contains the source data.
`mountPoint`	The directory of remote source to mount the source.
`extraConfigs`	Extra configurations.

Value

TRUE if the path was successfully mounted.

`mssparkutils.fs.mv` *Moves a file or directory, possibly across FileSystems. For intra-FileSystem, it is implemented by hadoop fs rename operation. For inter-FileSystem, This is implemented as a copy followed by delete.*

Description

Moves a file or directory, possibly across FileSystems. For intra-FileSystem, it is implemented by hadoop fs rename operation. For inter-FileSystem, This is implemented as a copy followed by delete.

Usage

```
mssparkutils.fs.mv(from, to, createPath = FALSE, overwrite = FALSE)
```

Arguments

`from`	FileSystem URI of the source file or directory.
`to`	FileSystem URI of the destination file or directory.
`createPath`	if TRUE, will firstly create the parent dir if not exists before move op.
`overwrite`	if TRUE, will overwrite the destination folder if exists.

Value

FALSE to mimic the result of mv operation fail.

Examples

```
mssparkutils.fs.mv("/tmp/my-folder/", "adls:/xxx/tmp/b")
```

`mssparkutils.fs.put` *Writes the given String out to a file, encoded in UTF-8.*

Description

Writes the given String out to a file, encoded in UTF-8.

Usage

```
mssparkutils.fs.put(file, content, overwrite = FALSE)
```

Arguments

`file`	FileSystem URI.
`content`	Content of file to write, encoded in System default charset.
`overwrite`	If set to TRUE, the file will be overwritten if it existed already. Note that if overwrite is TRUE and the the write fails, the original file. may still be deleted.

Value

FALSE to mimic the result of file put operation fail.

Examples

```
mssparkutils.fs.put("/tmp/my-file", "Hello world!", TRUE)
```

mssparkutils.fs.refreshMounts *Refresh workspace level mount points.*

Description

Refresh workspace level mount points.

Usage

```
mssparkutils.fs.refreshMounts()
```

Value

FALSE to mimic the refreshMounts fail to refresh mount info.

Examples

```
mssparkutils.fs.refreshMounts()
```

mssparkutils.fs.rm *Removes a file or directory.*

Description

Removes a file or directory.

Usage

```
mssparkutils.fs.rm(dir, recurse = FALSE)
```

Arguments

dir	FileSystem URI for a single file or a directory.
recurse	if TRUE, all files and directories will be recursively deleted.

Value

FALSE to mimic the result of dir deletion fail.

Examples

```
mssparkutils.fs.rm("/tmp/my-folder/", TRUE)
```

`mssparkutils.fs.unmount`

Removes a mount point.

Description

Removes a mount point.

Usage

```
mssparkutils.fs.unmount(mountPoint)
```

Arguments

`mountPoint`	The directory that was previously mounted.

Value

FALSE to mimic the result of unmount `mountPoint` fail.

Examples

```
mssparkutils.fs.unmount("/mnt")
```

`mssparkutils.fs.unmountFromDriverNode`

Removes a mount point from driver node.

Description

Removes a mount point from driver node.

Usage

```
mssparkutils.fs.unmountFromDriverNode(mountPoint)
```

Arguments

`mountPoint`	The directory that was previously mounted.

Value

TRUE if the mount point was successfully unmounted.

mssparkutils.help *Get help message for this module.*

Description

Get help message for this module.

Usage

```
mssparkutils.help(methodName = "")
```

Arguments

methodName	method name to get more information.

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils module when used in azure synapse runtime.

Examples

```
mssparkutils.help()
```

mssparkutils.lakehouse.create *Create a lakehouse*

Description

Create a lakehouse

Usage

```
mssparkutils.lakehouse.create(
  name,
  description = "",
  definition = "",
  workspaceId = ""
)
```

Arguments

name	Name of the lakehouse
description	Description of the lakehouse
definition	Definition of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

---

mssparkutils.lakehouse.delete

Delete a lakehouse

Description

Delete a lakehouse

Usage

```
mssparkutils.lakehouse.delete(name, workspaceId = "")
```

Arguments

name	Name of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

---

mssparkutils.lakehouse.get

Get a lakehouse

Description

Get a lakehouse

Usage

```
mssparkutils.lakehouse.get(name = "", workspaceId = "")
```

Arguments

name	Name of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

mssparkutils.lakehouse.help

The lakehouse module.

Description

mssparkutils.lakehouse.create(name: String, description: String, workspaceId: String): Lakehouse -> Create a lakehouse mssparkutils.lakehouse.get(name: String, workspaceId: String): Lakehouse -> Get a lakehouse mssparkutils.lakehouse.delete(name: String, workspaceId: String): void -> Delete a lakehouse mssparkutils.lakehouse.update(name: String, newName: String, description: String, workspaceId: String): Lakehouse -> Update a lakehouse

Usage

```
mssparkutils.lakehouse.help(methodName = "")
```

Arguments

methodName	method name to get more information

mssparkutils.lakehouse.list

List all lakehouses

Description

List all lakehouses

Usage

```
mssparkutils.lakehouse.list(workspaceId = "", maxResults = 1000L)
```

Arguments

workspaceId	Workspace id of the lakehouse, default to current workspace
maxResults	Maximum number of lakehouses to return, default to 1000

Value

A list of lakehouse objects

`mssparkutils.lakehouse.update`
Update a lakehouse

Description

Update a lakehouse

Usage

```
mssparkutils.lakehouse.update(
  name,
  newName,
  description = "",
  workspaceId = ""
)
```

Arguments

`name`	Name of the lakehouse
`newName`	New name of the lakehouse
`description`	Description of the lakehouse
`workspaceId`	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

`mssparkutils.nbResPath`
Gets the local path of the notebook resource.

Description

Gets the local path of the notebook resource.

Usage

```
mssparkutils.nbResPath()
```

Value

The local path of the notebook resource.

mssparkutils.notebook.exit

This method lets you exit a notebook with a value.

Description

This method lets you exit a notebook with a value.

Usage

```
mssparkutils.notebook.exit(value)
```

Arguments

value	the value to return when exiting.

Value

No return value, mimic behavior to set the notebook run exit value using value.

Examples

```
mssparkutils.notebook.exit('exitVal')
```

mssparkutils.notebook.help

The notebook module.

Description

The notebook module.

Usage

```
mssparkutils.notebook.help(methodName = "")
```

Arguments

methodName	method name to get more information.

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils notebook module when used in azure synapse runtime.

Examples

```
mssparkutils.notebook.help()
mssparkutils.notebook.help("run")
```

`mssparkutils.notebook.run`

Runs a notebook and returns its exit value. The notebook will run in the current livy session context by default.

Description

Runs a notebook and returns its exit value. The notebook will run in the current livy session context by default.

Usage

```
mssparkutils.notebook.run(
  path,
  timeoutSeconds = 90,
  arguments = NULL,
  workspace = ""
)
```

Arguments

`path`	absolute path to the notebook, e.g. /path/to/notebook.
`timeoutSeconds`	timeout in seconds for the called notebook.
`arguments`	string map of arguments to pass to the notebook.
`workspace`	Workspace of the notebook.

Value

Empty string to mimic the exitVal set by `mssparkutils.notebook.exit`.

Examples

```
mssparkutils.notebook.run('NB1')
mssparkutils.notebook.run('NB1', 200)
mssparkutils.notebook.run('NB1', 200, list("input"=30))
```

`mssparkutils.notebook.runMultiple`

Runs multiple notebooks concurrently with support for dependency relationships. Details can be found in mssparkutils.notebook.help("runMultiple").

Description

Runs multiple notebooks concurrently with support for dependency relationships. Details can be found in mssparkutils.notebook.help("runMultiple").

Usage

```
mssparkutils.notebook.runMultiple(pathsOrPipeline)
```

Arguments

`pathsOrPipeline`

A list of notebook names or a complex data structure (JSON string) that meets the requirements of the com.microsoft.spark.notebook.msutils.impl.MsNotebookPipeline scala class.

Value

a list of exit values and exceptions for each notebook

`mssparkutils.notebook.updateNBSEndpoint`

provide a way to make people can update the endpoint

Description

provide a way to make people can update the endpoint

Usage

```
mssparkutils.notebook.updateNBSEndpoint(endpoint)
```

Arguments

`endpoint`	the new point

`mssparkutils.notebook.validateDAG`

Check if the DAG is correctly defined, if the syntax is correct, and if notebooks are found in the workspace without actual execution. Details can be found in mssparkutils.notebook.help("validateDAG").

Description

Check if the DAG is correctly defined, if the syntax is correct, and if notebooks are found in the workspace without actual execution. Details can be found in mssparkutils.notebook.help("validateDAG").

Usage

```
mssparkutils.notebook.validateDAG(dag)
```

Arguments

`dag`	A list of notebook names or a complex data structure (JSON string) that meets the requirements of the com.microsoft.spark.notebook.msutils.impl.MsNotebookPipeline scala class.

Value

check result

`mssparkutils.runtime.context`

Get runtime properties

Description

Get runtime properties

Usage

```
mssparkutils.runtime.context()
```

Value

A dummy env object to mimic the result of runtime context method when used in azure synapse runtime.

Examples

```
mssparkutils.runtime.context()
```

`mssparkutils.runtime.setHcReplId`
Set runtime high concurrency mode repl id

Description

Set runtime high concurrency mode repl id

Usage

```
mssparkutils.runtime.setHcReplId(replId)
```

Arguments

`replId`	High concurrency mode repl id

`mssparkutils.session.stop`
Stop an interactive session

Description

Stop an interactive session

Usage

```
mssparkutils.session.stop(detach = TRUE)
```

Arguments

`detach`	If detach is True, stop session from standard session, or detach current notebook from high concurrency session; if detach is False, stop session in any session. Default is TRUE.

`notebookutils.conf.get` *Get a config value*

Description

Dummy in-memory implementation for local development.

Usage

```
notebookutils.conf.get(key, default = "")
```

Arguments

`key`	Config key
`default`	Default value when key is missing

`notebookutils.conf.set` *Set a config key/value*

Description

Dummy in-memory implementation for local development.

Usage

```
notebookutils.conf.set(key, value)
```

Arguments

`key`	Config key
`value`	Config value

notebookutils.connections.getCredential

Get credential for a connection

Description

Dummy implementation for local development.

Usage

```
notebookutils.connections.getCredential(connectionId, artifactId = "")
```

Arguments

connectionId	Connection id
artifactId	Artifact id

Value

A dummy credential object (list)

notebookutils.connections.getHelpString

Get help string for a method.

Description

Get help string for a method.

Usage

```
notebookutils.connections.getHelpString(funcName = "", namespace = "")
```

Arguments

funcName	function name
namespace	namespace

`notebookutils.credentials.getConnectionStringOrCreds`

Take linked service name as input and return connection string or credentials depending on the configuration of the linked service.

Description

Take linked service name as input and return connection string or credentials depending on the configuration of the linked service.

Usage

```
notebookutils.credentials.getConnectionStringOrCreds(linkedService)
```

Arguments

`linkedService`	Linked service name.

Value

A empty string used to mimic credentials returned by azure synapse runtime for `linkedService`.

Examples

```
notebookutils.credentials.getConnectionStringOrCreds('AzureDataLakeStorage1')
```

`notebookutils.credentials.getFullConnectionString`

Take linked service name as input and return full connection string with credentials.

Description

Take linked service name as input and return full connection string with credentials.

Usage

```
notebookutils.credentials.getFullConnectionString(linkedService)
```

Arguments

`linkedService`	Linked service name.

Value

A empty string used to mimic connection string returned by azure synapse runtime for `linkedService`.

Examples

```
notebookutils.credentials.getConnectionStringOrCreds('AzureDataLakeStorage1')
```

`notebookutils.credentials.getPropertiesAll`
Return all the properties of a given linked service in string format.

Description

Return all the properties of a given linked service in string format.

Usage

```
notebookutils.credentials.getPropertiesAll(linkedService)
```

Arguments

`linkedService`	Linked service name.

Value

A empty string used to mimic properties string returned by azure synapse runtime for `linkedService`.

Examples

```
notebookutils.credentials.getPropertiesAll('AzureDataLakeStorage1')
```

`notebookutils.credentials.getSecret`
Return AKV secret.

Description

Return AKV secret.

Usage

```
notebookutils.credentials.getSecret(akvName, secret, linkedService = NULL)
```

Arguments

`akvName`	Azure Key Vault name.
`secret`	name of the secret being fetched.
`linkedService`	linkedService name of the AKV linked service.

Value

A empty string used to mimic secret returned by azure synapse runtime for given `akvName` and `secret`.

Examples

```
notebookutils.credentials.getSecret('akvName', 'secretName')
notebookutils.credentials.getSecret('akvName', 'secretName', 'AzureDataLakeStorage1')
```

`notebookutils.credentials.getSecretWithLS`

Return AKV secret using linkedService.

Description

Return AKV secret using linkedService.

Usage

```
notebookutils.credentials.getSecretWithLS(linkedService, secret)
```

Arguments

`linkedService`	linkedService name of the AKV linked service.
`secret`	name of the secret being fetched.

Value

A empty string used to mimic secret returned by azure synapse runtime for given `linkedService` and `secret`.

Examples

```
notebookutils.credentials.getSecretWithLS('AzureDataLakeStorage1', 'secretName')
```

notebookutils.credentials.getToken

Get AAD token for a resource.

Description

Get AAD token for a resource.

Usage

```
notebookutils.credentials.getToken(audience, name = "")
```

Arguments

audience	token audience.
name	token audience.

Value

A empty string used to mimic token returned by azure synapse runtime for accessing resource audience.

Examples

```
notebookutils.credentials.getToken('synapse')
notebookutils.credentials.getToken('storage')
notebookutils.credentials.getToken('storage', 'storage')
```

notebookutils.credentials.help

Get help message.

Description

Get help message.

Usage

```
notebookutils.credentials.help()
```

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils credentials module when used in azure synapse runtime.

Examples

```
notebookutils.credentials.help()
```

`notebookutils.credentials.isValidToken`

Returns true if the input token is valid (i.e, hasn't expired).

Description

Returns true if the input token is valid (i.e, hasn't expired).

Usage

```
notebookutils.credentials.isValidToken(token)
```

Arguments

`token`	token to validate.

Value

FALSE to mimic the result if `token` is invalid.

Examples

```
notebookutils.credentials.isValidToken('dummyToken')
```

`notebookutils.credentials.putSecret`

Put AKV secret using with or without linkedService.

Description

Put AKV secret using with or without linkedService.

Usage

```
notebookutils.credentials.putSecret(
  akvName,
  secretName,
  secretValue,
  linkedService = NULL
)
```

Arguments

akvName	Azure Key Vault name.
secretName	name of the secret being written.
secretValue	value of the secret being written.
linkedService	name of the AKV linked service.

Value

The secretValue been written.

Examples

```
notebookutils.credentials.putSecret('akvName', 'secretName', 'secretValue')
notebookutils.credentials.putSecret('akvName', 'secretName', 'secretValue', 'AzureDataLakeStorage1')
```

---

notebookutils.credentials.putSecretWithLS

Put AKV secret using linkedService.

Description

Put AKV secret using linkedService.

Usage

```
notebookutils.credentials.putSecretWithLS(
  linkedService,
  secretName,
  secretValue
)
```

Arguments

linkedService	name of AKV linked service.
secretName	name of the secret being written.
secretValue	value of the secret being written.

Value

The secretValue been written.

Examples

```
notebookutils.credentials.putSecretWithLS('AzureDataLakeStorage1', 'secretName', 'secretValue')
```

notebookutils.env.getClusterId *Get cluster id.*

Description

Get cluster id.

Usage

```
notebookutils.env.getClusterId()
```

Value

A empty string used to mimic cluster id of azure synapse runtime.

Examples

```
notebookutils.env.getClusterId()
```

notebookutils.env.getJobId *Get job Id.*

Description

Get job Id.

Usage

```
notebookutils.env.getJobId()
```

Value

A empty string used to mimic the id of spark job been submitted to azure synapse runtime.

Examples

```
notebookutils.env.getJobId()
```

notebookutils.env.getPoolName

Get pool name.

Description

Get pool name.

Usage

```
notebookutils.env.getPoolName()
```

Value

A empty string used to mimic the name of user's azure synapse spark pool.

Examples

```
notebookutils.env.getPoolName()
```

notebookutils.env.getUserId

Get user Id.

Description

Get user Id.

Usage

```
notebookutils.env.getUserId()
```

Value

A empty string used to mimic the id of user.

Examples

```
notebookutils.env.getUserId()
```

notebookutils.env.getUserName
Get user name.

Description

Get user name.

Usage

```
notebookutils.env.getUserName()
```

Value

A empty string used to mimic the name of user.

Examples

```
notebookutils.env.getUserName()
```

notebookutils.env.getWorkspaceName
Get workspace name.

Description

Get workspace name.

Usage

```
notebookutils.env.getWorkspaceName()
```

Value

A empty string used to mimic the id of the user's azure synapse workspace.

Examples

```
notebookutils.env.getWorkspaceName()
```

notebookutils.env.help

Get help message.

Description

Get help message.

Usage

```
notebookutils.env.help()
```

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils env module when used in azure synapse runtime.

Examples

```
notebookutils.env.help()
```

notebookutils.fabricClient.delete

Send a DELETE request to Fabric.

Description

Send a DELETE request to Fabric.

Usage

```
notebookutils.fabricClient.delete(path, headers = list())
```

Arguments

path	Path of the request
headers	Headers of the request

`notebookutils.fabricClient.get`
Send a GET request to Fabric.

Description

Send a GET request to Fabric.

Usage

```
notebookutils.fabricClient.get(path, headers = list())
```

Arguments

`path`	Path of the request
`headers`	Headers of the request

Value

RestResponse Response of the request

`notebookutils.fabricClient.help`
Get help string for a method.

Description

Get help string for a method.

Usage

```
notebookutils.fabricClient.help(methodName = "")
```

Arguments

`methodName`	Name of the method

notebookutils.fabricClient.listCapacities

List all capacities in the workspace.

Description

List all capacities in the workspace.

Usage

```
notebookutils.fabricClient.listCapacities(maxResults = 1000L)
```

Arguments

maxResults	Maximum number of capacities to return, default is 1000

Value

Array of Capacity objects

notebookutils.fabricClient.patch

Send a PATCH request to Fabric.

Description

Send a PATCH request to Fabric.

Usage

```
notebookutils.fabricClient.patch(path, content, headers = list())
```

Arguments

path	Path of the request
content	Content of the request
headers	Headers of the request

Value

RestResponse Response of the request

`notebookutils.fabricClient.post`

Send a POST request to Fabric.

Description

Send a POST request to Fabric.

Usage

```
notebookutils.fabricClient.post(path, content, headers = list())
```

Arguments

`path`	Path of the request
`content`	Content of the request
`headers`	Headers of the request

Value

RestResponse Response of the request

`notebookutils.fabricClient.put`

Send a PUT request to Fabric.

Description

Send a PUT request to Fabric.

Usage

```
notebookutils.fabricClient.put(path, content, headers = list())
```

Arguments

`path`	Path of the request
`content`	Content of the request
`headers`	Headers of the request

Value

RestResponse Response of the request

notebookutils.fs.append *Append the given String to a file, encoded in UTF-8.*

Description

Append the given String to a file, encoded in UTF-8.

Usage

```
notebookutils.fs.append(file, content, createFileIfNotExists = FALSE)
```

Arguments

file	FileSystem URI
content	Content needs to be append to file, encoded in System default charset.
createFileIfNotExists	If set to true, will firstly try to create file if not exists.

Value

FALSE to mimic the result if file content append fail.

Examples

```
notebookutils.fs.append("/tmp/my-file", "Hello world!")
notebookutils.fs.append("/tmp/my-file", "Hello world!", TRUE)
```

notebookutils.fs.cp *Copies a file or directory, possibly across FileSystems.*

Description

Copies a file or directory, possibly across FileSystems.

Usage

```
notebookutils.fs.cp(from, to, recurse = FALSE)
```

Arguments

from	FileSystem URI of the source file or directory
to	FileSystem URI of the destination file or directory
recurse	if TRUE, all files and directories will be recursively copied

Value

FALSE to mimic the result if file or directory `from` fail to copy to `to`.

Examples

```
notebookutils.fs.cp("/tmp/my-folder/a", "adls://xxx/tmp/b")
notebookutils.fs.cp("/tmp/my-folder/a", "adls://xxx/tmp/b", TRUE)
```

`notebookutils.fs.exists`

Check if a file or directory exists.

Description

Check if a file or directory exists.

Usage

```
notebookutils.fs.exists(file)
```

Arguments

`file`	FileSystem URI

Value

TRUE if the file or directory exists

Examples

```
## Not run:
notebookutils.fs.exists("/tmp/my-file")

## End(Not run)
```

notebookutils.fs.fastcp

Copies a file or directory via azcopy, possibly across FileSystems.

Description

Copies a file or directory via azcopy, possibly across FileSystems.

Usage

```
notebookutils.fs.fastcp(from, to, recurse = TRUE, extraConfigs = NULL)
```

Arguments

from	FileSystem URI of the source file or directory
to	FileSystem URI of the destination file or directory
recurse	if TRUE, all files and directories will be recursively copied
extraConfigs	extra configs for azcopy, includes flags, timeout, aadToken, sourceLinkedService, destinationLinkedService

Value

TRUE if all files were successfully copied

Examples

```
## Not run:
notebookutils.fs.fastcp("file:/tmp/my-folder/a", "adls://xxx/tmp/b")

## End(Not run)
```

notebookutils.fs.getMountPath

Gets the local path of the mount point.

Description

Gets the local path of the mount point.

Usage

```
notebookutils.fs.getMountPath(mountPoint, scope = "")
```

Arguments

mountPoint	The directory that was previously mounted.
scope	Mount point level, job or workspace, default is job.

Value

Empty string to mimic the local mounted path related to mountPoint.

Examples

```
notebookutils.fs.getMountPath("/mnt")
notebookutils.fs.getMountPath("/mnt", "job")
```

---

notebookutils.fs.head *Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8.*

Description

Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8.

Usage

```
notebookutils.fs.head(file, maxBytes = 65535)
```

Arguments

file	FileSystem URI
maxBytes	Maximum number of bytes to read

Value

Empty string to mimic the returned content of file.

Examples

```
notebookutils.fs.head("/tmp/my-folder/my-file")
notebookutils.fs.head("/tmp/my-folder/my-file", 1000)
```

notebookutils.fs.help *notebookutils.fs provides utilities for working with various FileSystems.*

Description

Below is overview about the available methods:

Usage

```
notebookutils.fs.help(methodName = "")
```

Arguments

methodName	method name to get more information.

Details

notebookutils.fs.cp: Copies a file or directory, possibly across FileSystems notebookutils.fs.mv: Moves a file or directory, possibly across FileSystems notebookutils.fs.ls: Array -> Lists the contents of a directory notebookutils.fs.mkdirs: Creates the given directory if it does not exist, also creating any necessary parent directories notebookutils.fs.put: Writes the given String out to a file, encoded in UTF-8 notebookutils.fs.head: Returns up to the first 'maxBytes' bytes of the given file as a String encoded in UTF-8 notebookutils.fs.append: Append the content to a file notebookutils.fs.rm: Removes a file or directory

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils fs module when used in azure synapse runtime.

Examples

```
notebookutils.fs.help()
notebookutils.fs.help("ls")
```

notebookutils.fs.ls *Lists the contents of a directory.*

Description

Lists the contents of a directory.

Usage

```
notebookutils.fs.ls(dir)
```

Arguments

dir	FileSystem URI

Value

Empty list to mimic the file list under dir.

Examples

```
notebookutils.fs.ls("/tmp/my-folder/")
```

---

notebookutils.fs.mkdirs

*Creates the given directory if it does not exist, also creating any necessary parent * directories.*

Description

Creates the given directory if it does not exist, also creating any necessary parent * directories.

Usage

```
notebookutils.fs.mkdirs(dir)
```

Arguments

dir	FileSystem URI

Value

FALSE to mimic the result if dir creation fail.

Examples

```
notebookutils.fs.mkdirs("/tmp/a/b/c")
```

notebookutils.fs.mount

Attach remote storage (Blob, Gen2, Azure File Share) to all working nodes (driver node and worker nodes)

Description

Attach remote storage (Blob, Gen2, Azure File Share) to all working nodes (driver node and worker nodes)

Usage

```
notebookutils.fs.mount(source, mountPoint, extraConfigs = NULL)
```

Arguments

source	FileSystem URI that contains the source data.
mountPoint	The directory of remote source to mount the source.
extraConfigs	Extra configurations.

Value

FALSE to mimic the result if mountPoint creation fail.

Examples

```
notebookutils.fs.mount("abfss://xxx.dfs.core.windows.net", "/mnt")
```

notebookutils.fs.mounts

Show information about what is mounted. Any credentials used to mount the mount points listed will not be displayed.

Description

Show information about what is mounted. Any credentials used to mount the mount points listed will not be displayed.

Usage

```
notebookutils.fs.mounts(extraConfigs = NULL)
```

Arguments

extraConfigs	Extra configurations.

Value

The list of MountPointInfo.

`notebookutils.fs.mountToDriverNode` *Attach remote storage (Blob, Gen2, Azure File Share) to driver node*

Description

Attach remote storage (Blob, Gen2, Azure File Share) to driver node

Usage

```
notebookutils.fs.mountToDriverNode(source, mountPoint, extraConfigs = NULL)
```

Arguments

`source`	FileSystem URI that contains the source data.
`mountPoint`	The directory of remote source to mount the source.
`extraConfigs`	Extra configurations.

Value

TRUE if the path was successfully mounted.

`notebookutils.fs.mv` *Moves a file or directory, possibly across FileSystems. For intra-FileSystem, it is implemented by hadoop fs rename operation. For inter-FileSystem, This is implemented as a copy followed by delete.*

Description

Moves a file or directory, possibly across FileSystems. For intra-FileSystem, it is implemented by hadoop fs rename operation. For inter-FileSystem, This is implemented as a copy followed by delete.

Usage

```
notebookutils.fs.mv(from, to, createPath = FALSE, overwrite = FALSE)
```

Arguments

`from`	FileSystem URI of the source file or directory.
`to`	FileSystem URI of the destination file or directory.
`createPath`	if TRUE, will firstly create the parent dir if not exists before move op.
`overwrite`	if TRUE, will overwrite the destination folder if exists.

Value

FALSE to mimic the result of mv operation fail.

Examples

```
notebookutils.fs.mv("/tmp/my-folder/", "adls:/xxx/tmp/b")
```

---

notebookutils.fs.put *Writes the given String out to a file, encoded in UTF-8.*

Description

Writes the given String out to a file, encoded in UTF-8.

Usage

```
notebookutils.fs.put(file, content, overwrite = FALSE)
```

Arguments

file	FileSystem URI.
content	Content of file to write, encoded in System default charset.
overwrite	If set to TRUE, the file will be overwritten if it existed already. Note that if overwrite is TRUE and the the write fails, the original file. may still be deleted.

Value

FALSE to mimic the result of file put operation fail.

Examples

```
notebookutils.fs.put("/tmp/my-file", "Hello world!", TRUE)
```

notebookutils.fs.refreshMounts *Refresh workspace level mount points.*

Description

Refresh workspace level mount points.

Usage

```
notebookutils.fs.refreshMounts()
```

Value

FALSE to mimic the refreshMounts fail to refresh mount info.

Examples

```
notebookutils.fs.refreshMounts()
```

notebookutils.fs.rm *Removes a file or directory.*

Description

Removes a file or directory.

Usage

```
notebookutils.fs.rm(dir, recurse = FALSE)
```

Arguments

dir	FileSystem URI for a single file or a directory.
recurse	if TRUE, all files and directories will be recursively deleted.

Value

FALSE to mimic the result of dir deletion fail.

Examples

```
notebookutils.fs.rm("/tmp/my-folder/", TRUE)
```

notebookutils.fs.unmount

Removes a mount point.

Description

Removes a mount point.

Usage

```
notebookutils.fs.unmount(mountPoint)
```

Arguments

mountPoint	The directory that was previously mounted.

Value

FALSE to mimic the result of unmount `mountPoint` fail.

Examples

```
notebookutils.fs.unmount("/mnt")
```

notebookutils.fs.unmountFromDriverNode

Removes a mount point from driver node.

Description

Removes a mount point from driver node.

Usage

```
notebookutils.fs.unmountFromDriverNode(mountPoint)
```

Arguments

mountPoint	The directory that was previously mounted.

Value

TRUE if the mount point was successfully unmounted.

notebookutils.help *Get help message for this module.*

Description

Get help message for this module.

Usage

```
notebookutils.help(methodName = "")
```

Arguments

methodName	method name to get more information.

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils module when used in azure synapse runtime.

Examples

```
notebookutils.help()
```

notebookutils.initialize *Initialize notebookutils, using in pre-run code*

Description

Initialize notebookutils, using in pre-run code

Usage

```
notebookutils.initialize()
```

notebookutils.lakehouse.create

Create a lakehouse

Description

Create a lakehouse

Usage

```
notebookutils.lakehouse.create(
  name,
  description = "",
  definition = "",
  workspaceId = ""
)
```

Arguments

name	Name of the lakehouse
description	Description of the lakehouse
definition	Definition of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

notebookutils.lakehouse.delete

Delete a lakehouse

Description

Delete a lakehouse

Usage

```
notebookutils.lakehouse.delete(name, workspaceId = "")
```

Arguments

name	Name of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

---

`notebookutils.lakehouse.get`
Get a lakehouse

Description

Get a lakehouse

Usage

```
notebookutils.lakehouse.get(name = "", workspaceId = "")
```

Arguments

`name`	Name of the lakehouse
`workspaceId`	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

`notebookutils.lakehouse.getDefinition`
Get the definition of a lakehouse

Description

Get the definition of a lakehouse

Usage

```
notebookutils.lakehouse.getDefinition(name, workspaceId = "")
```

Arguments

`name`	Name of the lakehouse
`workspaceId`	Workspace id of the lakehouse, default to current workspace

Value

The definition of the lakehouse

notebookutils.lakehouse.getWithProperties

Get the info of a Lakehouse with properties.

Description

Get the info of a Lakehouse with properties.

Usage

```
notebookutils.lakehouse.getWithProperties(name, workspaceId = "")
```

Arguments

name	Name of the Lakehouse.
workspaceId	Id of the workspace, default to current workspace.

Value

Artifact object. Please refer to: https://learn.microsoft.com/en-us/rest/api/fabric /articles/item-management/properties/lakeho properties

notebookutils.lakehouse.help

The lakehouse module.

Description

notebookutils.lakehouse.create(name: String, description: String, workspaceId: String): Lakehouse -> Create a lakehouse notebookutils.lakehouse.get(name: String, workspaceId: String): Lakehouse -> Get a lakehouse notebookutils.lakehouse.delete(name: String, workspaceId: String): void -> Delete a lakehouse notebookutils.lakehouse.update(name: String, newName: String, description: String, workspaceId: String): Lakehouse -> Update a lakehouse

Usage

```
notebookutils.lakehouse.help(methodName = "")
```

Arguments

methodName	method name to get more information

notebookutils.lakehouse.list

List all lakehouses

Description

List all lakehouses

Usage

```
notebookutils.lakehouse.list(workspaceId = "", maxResults = 1000L)
```

Arguments

workspaceId	Workspace id of the lakehouse, default to current workspace
maxResults	Maximum number of lakehouses to return, default to 1000

Value

A list of lakehouse objects

notebookutils.lakehouse.listTables

List all tables in a Lakehouse.

Description

List all tables in a Lakehouse.

Usage

```
notebookutils.lakehouse.listTables(
  lakehouse = "",
  workspaceId = "",
  maxResults = 1000L
)
```

Arguments

lakehouse	Name of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace
maxResults	Maximum number of tables to return, default to 1000

Value

A list of table objects

notebookutils.lakehouse.loadTable

Starts a load table operation.

Description

Starts a load table operation.

Usage

```
notebookutils.lakehouse.loadTable(
  loadOption,
  table,
  lakehouse = "",
  workspaceId = ""
)
```

Arguments

loadOption	string, loadOption Load options. Please refer to https://learn.microsoft.com/en-us/rest/api/fabric/lakehouse/tables/load-table
table	Name of the table
lakehouse	Name of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

boolean

notebookutils.lakehouse.update

Update a lakehouse

Description

Update a lakehouse

Usage

```
notebookutils.lakehouse.update(
  name,
  newName,
  description = "",
  workspaceId = ""
)
```

Arguments

name	Name of the lakehouse
newName	New name of the lakehouse
description	Description of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

A lakehouse object

---

notebookutils.lakehouse.updateDefinition

Get the definition of a lakehouse

Description

Get the definition of a lakehouse

Usage

```
notebookutils.lakehouse.updateDefinition(name, definition, workspaceId = "")
```

Arguments

name	Name of the lakehouse
definition	Definition of the lakehouse
workspaceId	Workspace id of the lakehouse, default to current workspace

Value

The definition of the lakehouse

---

notebookutils.nbResPath

Gets the local path of the notebook resource.

Description

Gets the local path of the notebook resource.

Usage

```
notebookutils.nbResPath()
```

Value

The local path of the notebook resource.

notebookutils.notebook.create

Create a notebook

Description

Create a notebook

Usage

```
notebookutils.notebook.create(
  name,
  description = "",
  content = "",
  defaultLakehouse = "",
  defaultLakehouseWorkspace = "",
  workspaceId = ""
)
```

Arguments

`name`	Name of the notebook
`description`	Description of the notebook
`content`	Definition of the notebook
`defaultLakehouse`	Default lakehouse of the notebook
`defaultLakehouseWorkspace`	Default lakehouse workspace of the notebook
`workspaceId`	Workspace id of the notebook, default to current workspace

Value

A notebook object

notebookutils.notebook.delete

Delete a notebook

Description

Delete a notebook

Usage

```
notebookutils.notebook.delete(name, workspaceId = "")
```

Arguments

name	Name of the notebook
workspaceId	Workspace id of the notebook, default to current workspace

---

notebookutils.notebook.exit

This method lets you exit a notebook with a value.

Description

This method lets you exit a notebook with a value.

Usage

```
notebookutils.notebook.exit(value)
```

Arguments

value	the value to return when exiting.

Value

No return value, mimic behavior to set the notebook run exit value using value.

Examples

```
notebookutils.notebook.exit('exitVal')
```

---

notebookutils.notebook.get

Get a notebook

Description

Get a notebook

Usage

```
notebookutils.notebook.get(name, workspaceId = "")
```

Arguments

name	Name of the notebook
workspaceId	Workspace id of the notebook, default to current workspace

Value

A notebook object

`notebookutils.notebook.help`
The notebook module.

Description

The notebook module.

Usage

```
notebookutils.notebook.help(methodName = "")
```

Arguments

`methodName`	method name to get more information.

Value

No return value, print empty string to mimic the behavior of help method of mssparkutils notebook module when used in azure synapse runtime.

Examples

```
notebookutils.notebook.help()
notebookutils.notebook.help("run")
```

`notebookutils.notebook.list`
List all notebooks

Description

List all notebooks

Usage

```
notebookutils.notebook.list(workspaceId = "", maxResults = 1000L)
```

Arguments

`workspaceId`	Workspace id of the notebook, default to current workspace
`maxResults`	Maximum number of notebooks to return, default to 1000

Value

A list of notebook objects

`notebookutils.notebook.run`

Runs a notebook and returns its exit value. The notebook will run in the current livy session context by default.

Description

Runs a notebook and returns its exit value. The notebook will run in the current livy session context by default.

Usage

```
notebookutils.notebook.run(
  path,
  timeoutSeconds = 90,
  arguments = NULL,
  workspace = ""
)
```

Arguments

`path`	absolute path to the notebook, e.g. /path/to/notebook.
`timeoutSeconds`	timeout in seconds for the called notebook.
`arguments`	string map of arguments to pass to the notebook.
`workspace`	Workspace of the notebook.

Value

Empty string to mimic the exitVal set by `mssparkutils.notebook.exit`.

Examples

```
notebookutils.notebook.run('NB1')
notebookutils.notebook.run('NB1', 200)
notebookutils.notebook.run('NB1', 200, list("input"=30))
```

notebookutils.notebook.update

Update a notebook

Description

Update a notebook

Usage

```
notebookutils.notebook.update(
  name,
  newName,
  description = "",
  workspaceId = ""
)
```

Arguments

name	Name of the notebook
newName	New name of the notebook
description	Description of the notebook
workspaceId	Workspace id of the notebook, default to current workspace

Value

A notebook object

notebookutils.notebook.updateDefinition

Get the definition of a notebook

Description

Get the definition of a notebook

Usage

```
notebookutils.notebook.updateDefinition(
  name,
  content,
  defaultLakehouse = "",
  defaultLakehouseWorkspace = "",
  workspaceId = "",
  environmentId = "",
  environmentWorkspaceId = ""
)
```

Arguments

`name`	Name of the notebook
`content`	Definition of the notebook
`defaultLakehouse`	Default lakehouse of the notebook
`defaultLakehouseWorkspace`	Default lakehouse workspace of the notebook
`workspaceId`	Workspace id of the notebook, default to current workspace
`environmentId`	Environment id of the notebook, default to current environment
`environmentWorkspaceId`	Environment workspace id of the notebook

Value

The definition of the notebook

`notebookutils.notebook.updateNBSEndpoint`

provide a way to make people can update the endpoint

Description

provide a way to make people can update the endpoint

Usage

```
notebookutils.notebook.updateNBSEndpoint(endpoint)
```

Arguments

`endpoint`	the new point

`notebookutils.notebook.validateDAG`

Check if the DAG is correctly defined, if the syntax is correct, and if notebooks are found in the workspace without actual execution. Details can be found in mssparkutils.notebook.help("validateDAG").

Description

Check if the DAG is correctly defined, if the syntax is correct, and if notebooks are found in the workspace without actual execution. Details can be found in mssparkutils.notebook.help("validateDAG").

Usage

```
notebookutils.notebook.validateDAG(dag)
```

Arguments

dag	A list of notebook names or a complex data structure (JSON string) that meets the requirements of the com.microsoft.spark.notebook.msutils.impl.MsNotebookPipeline scala class.

Value

check result

---

notebookutils.runtime.context

Get runtime properties

Description

Get runtime properties

Usage

```
notebookutils.runtime.context()
```

Value

A dummy env object to mimic the result of runtime context method when used in azure synapse runtime.

Examples

```
notebookutils.runtime.context()
```

`notebookutils.runtime.help`

notebookutils.runtime is a utility to manage runtime context. context() returns the runtime context as a list.

Description

notebookutils.runtime is a utility to manage runtime context. context() returns the runtime context as a list.

Usage

```
notebookutils.runtime.help(methodName = "")
```

Arguments

`methodName`	method name to get more information.am

`notebookutils.runtime.setHcReplId`

Set runtime high concurrency mode repl id

Description

Set runtime high concurrency mode repl id

Usage

```
notebookutils.runtime.setHcReplId(replId)
```

Arguments

`replId`	High concurrency mode repl id

notebookutils.session.stop

Stop an interactive session

Description

Stop an interactive session

Usage

```
notebookutils.session.stop(detach = TRUE)
```

Arguments

detach	If detach is True, stop session from standard session, or detach current notebook from high concurrency session; if detach is False, stop session in any session. Default is TRUE.

notebookutils.udf.getFunctions

Get UDF functions metadata.

Description

Dummy implementation for local development.

Usage

```
notebookutils.udf.getFunctions(udf, workspaceId = "")
```

Arguments

udf	UDF artifact id or name
workspaceId	Workspace id

Value

A dummy UDF object (list)

`notebookutils.udf.getHelpString`
Get help string for a method.

Description

Get help string for a method.

Usage

```
notebookutils.udf.getHelpString(funcName = "", namespace = "")
```

Arguments

`funcName`	function name
`namespace`	namespace

`notebookutils.udf.help`
Get help string for a method.

Description

Get help string for a method.

Usage

```
notebookutils.udf.help(methodName = "")
```

Arguments

`methodName`	Name of the method

notebookutils.udf.run *Run a User data functions (UDF).*

Description

Run a User data functions (UDF).

Usage

```
notebookutils.udf.run(
  artifactId,
  functionName,
  parameters = list(),
  workspaceId = "",
  capacityId = ""
)
```

Arguments

artifactId	The UDF artifact id.
functionName	The UDF function name.
parameters	The UDF parameters.
workspaceId	The UDF workspace id, if not provided, it will be retrieved from the current workspace.
capacityId	The UDF capacity id, if not provided, it will be retrieved from the current capacity.

Value

The UDF execution result.

notebookutils.variableLibrary.get *Get a variable value*

Description

Dummy implementation for local development.

Usage

```
notebookutils.variableLibrary.get(variableReference)
```

Arguments

variableReference
: Variable reference

Value

A variable value (NULL)

---

notebookutils.variableLibrary.getHelpString

Get help string for a method.

Description

Get help string for a method.

Usage

```
notebookutils.variableLibrary.getHelpString(funcName = "", namespace = "")
```

Arguments

funcName	function name
namespace	namespace

---

notebookutils.variableLibrary.getLibrary

Get a variable library

Description

Dummy implementation for local development.

Usage

```
notebookutils.variableLibrary.getLibrary(variableLibraryName)
```

Arguments

variableLibraryName
: Variable library name

Value

A dummy variable library object (list)

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