S-Drive Email Agent
v1.25

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A. S-Drive Email Agent

S-Drive Email Agent is a toolkit that pulls emails from your mail server and uses the S-Drive and the Force.com API to create new cases or append to an existing case along with the attachments. It uses Email-To-Case functionality plus the S-Drive Attachments functionality for storing case attachments. It currently supports IMAP servers.

S-Drive Email Agent differs from Email-To-Case about uploading files to S-Drive as custom object attachments. So when your customers send email to your configured support email address, related email attachments are fetched from the email, uploaded to S-Drive Attachments and attached to the custom object.

1. Installation

a. Get the ZIP file by contacting S-Drive Support (sdrive@sdriveapp.com).
b. Make sure you have JDK 1.5.0_06 or above installed. To download and install go to http://www.oracle.com/technetwork/java/javase/downloads/index.html.
c. Make sure you have a test email account, and test Salesforce Service and Support organization to test with. Either Sandbox Orgs or Developer Edition accounts are free, and a great place to test.
d. Enable EmailToCase in your Salesforce Service and Support account. Go to **Setup → App Setup → Customize → Cases → Email-to-Case** (Figure 1-A). Click **"Edit"** button. Check **"Enable Email-to-Case"** and other checkboxes based on your needs to enable Email-to-Case functionality (Figure 1-B).
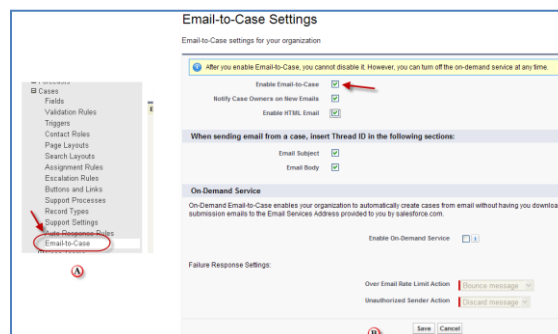

Figure 1

e. You need to create a routing address in the same page. Click "New" button inside the "Routing Addresses" section.
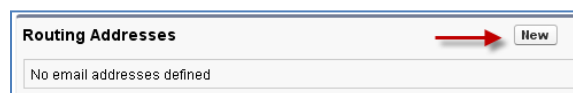

Figure 2

Figure 3

Type fields as shown in Figure 3. You need to specify your configured support email for "Email Address" section. Click "Save" button. It will require you to verify email address. Check support email address and click the link in the message to verify the address. Now you should see "Verified" for the configured email address (Figure 4). This routing address is important for replied emails. Customer replying to an email will attach email and attachments to the current case.

Figure 4

f. Do not forget to override the case page's view (or use inline attachments for Case Page Layout) to include Case Files section for S-Drive Attachments. You can refer to the **S-Drive Installation Guide → Creating Custom Object Files Page** and subsections for more information.

g. If you want to display email traffic for cases, you must add **"Emails"** related list to the Case Page Layout. Go to **Setup → App Setup → Customize → Cases → Page Layout**. Select **"Related Lists"** from the top menu. Drag and drop the **"Emails"** related list somewhere in the page layout. Click "Save" button to save the changes (Figure 5).
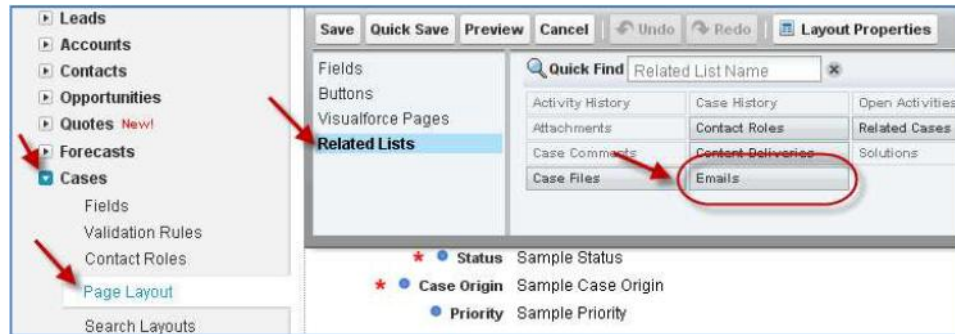
Figure 5

h. Extract the ZIP file to the local directory of your choice. We will refer to your local directory as **$Local** from now on. The following directory structure will be created:

$Local\SDriveEmailAgent   Contains config and main jar
$Local\SDriveEmailAgent\doc   Documentation
$Local\SDriveEmailAgent\lib   Supporting jar files
$Local\SDriveEmailAgent\bin   Files required for Windows Service installation

i. This step is required to install the SDriveEmailAgent as a Windows Service. Run "**$Local\SDriveEmailAgent\bin\Install-SDriveEmailAgent-Service.bat**" file to install the service. A command prompt window will be displayed. Press ENTER to close this window (Figure 6).
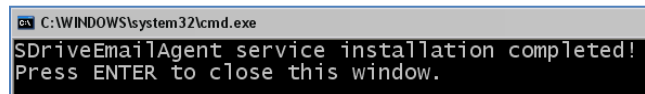

Figure 6

Important Note: *If* you changed the default installation path (C:\SDriveEmailAgent), you need to update the batch files contents (.bat) under the *$Local\SDriveEmailAgent\bin* folder using a text editor. Otherwise service installation will fail.

To run the "SDriveEmailAgent Service" automatically every time Windows starts open the "Services" console and find the "**SDriveEmailAgent**" service from the list and right click the name. Click "**Properties**" from the right-click menu. In the "**SDriveEmailAgent Properties**" window select "**Automatic**" as the "**Startup type**" and click "**Apply**" button. Click "**Start**" button to start the service (Figure 7-A and Figure 7-B).
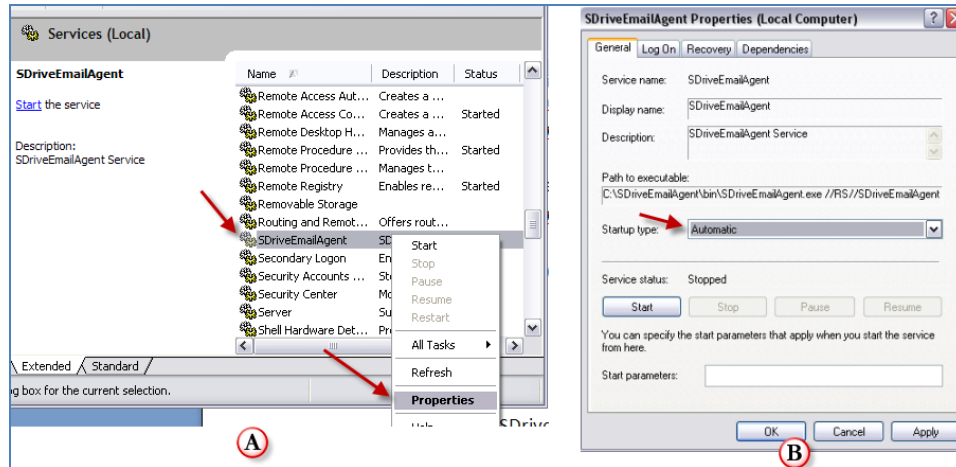
Figure 7

Important Note: You can delete the "SDriveEmailAgent Service" by running "**$Local\SDriveEmailAgent\bin\Delete-SDriveEmailAgent-Service.bat**" file. A command prompt window will be displayed. Press ENTER to close this window (Figure 8). Make sure that the "**Services**" window is closed before running the delete batch file.
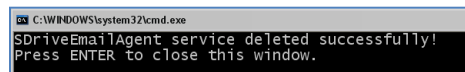

Figure 8

j. [OPTIONAL] You can install SDriveEmailAgent Status Application by running "**$Local\SDriveEmailAgent\bin\DisplayStatus-SDriveEmailAgent-Service.bat**" file. A command prompt window will be displayed. Press ENTER to close this window (Figure 9).
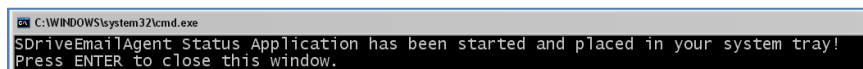

Figure 9

You can also start, stop, and configure the service using this status application (Figure 10).
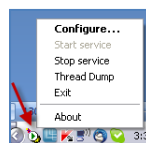

Figure 10

k. Log files are created under the **$Local\SDriveEmailAgent\logs** directory after the installation. You can inspect problems and display the progress using these log files (Figure 11).

Figure 11

2. Upgrade

a. Backup your old configuration files (***SDriveEmailAgent.txt*** and ***SDriveEmailAgentConfig.txt***).
b. Backup your old attachments folder (***$Local\SDriveEmailAgent\attachments***).
c. Delete old installation folder (***$Local\SDriveEmailAgent***) after backing up files.
d. Install new version of the S-Drive Email Agent using the instructions in the "**1. Installation**" section.
e. Replace backed up configuration files and attachments folder in the new installation folder.

3. Configuration

In the *$Local\SDriveEmailAgent* directory you will need to edit **SDriveEmailAgent.txt** to configure connections to your mail servers. Also in the *$Local\SDriveEmailAgent* directory you will need to configure the **SDriveEmailAgentConfig.txt** file to connect to salesforce.com. *SDriveEmailAgent.txt* and *SDriveEmailAgentConfig.txt* are both simple XML configuration files.

You can refer to http://phollaio.tumblr.com/post/22058001870/using-email2case-with-googles-gmail webpage to configure SDriveEmailAgent to work with Gmail.

a. SDriveEmailAgent.txt Configuration

URL	Name of the mail server to connect with.
PORT	The port to connect to on the Mail Server - optional Default port 143 will be used if not provided.
PROTOCOL	IMAP, but if you want to connect to SSL encrypted IMAP Servers (like e.g. GMAIL) use IMAPS and the PORT 993, may support others in the future.
USERNAME	Name of the user that will login to the mail server. Typically, the name of the email account, like platinumsupport *Note: Exchange may require the following format - userid@domain (as opposed to server\name or just name.)
PASSWORD	Password to authenticate the user against the mail server
INTERVAL	How often (in minutes) should the agent poll the mail server for new messages. This must be an integer greater than or equal to 1.
INBOX	Name of the folder to look for new messages in
READBOX	Name of the folder to move messages to after they have been processed.
ERRORBOX	Name of the folder to move messages to in the event of an error. If the agent cannot successfully execute a transaction with the sfdc server, messages will be moved to this folder so that manual action can be taken if necessary (requeueing etc...).

Note: If you want to nest folder names, be sure to either use the delimiter that is supported by your mail server for separating folders(often '/' or '.' or you can always use '.' and the agent will convert to the correct delimiter supported by your mail server at runtime.

Example #1:

```
<configFile>
    <server1>
        <url>exchange.company.com</url>
        <protocol>imap</protocol>
        <userName>mailman</userName>
        <password>passwrd</password>
        <interval>10</interval>
        <inbox>testInbox</inbox>
        <readbox>testInbox.testNestedProcessing</readbox>
        <errorbox>testInbox.testNestedError</errorbox>
    </server1>
</configFile>
```

Note that the email agent can poll multiple email inboxes. Here is an example of how to configure it to poll two email inboxes.

Example #2:

```
<configFile>
    <server1>
        <url>exchange.company.com</url>
        <protocol>imap</protocol>
        <userName>mailman_1</userName>
        <password>passwrd</password>
        <interval>10</interval>
        <inbox>testInbox_1</inbox>
        <readbox>testInbox.testNestedProcessing</readbox>
        <errorbox>testInbox.testNestedError</errorbox>
    </server1>
    <server2>
        <url>exchange.company.com</url>
        <protocol>imap</protocol>
        <userName>mailman_2</userName>
        <password>passwrd</password>
        <interval>10</interval>
        <inbox>testInbox_2</inbox>
        <readbox>testInbox.testNestedProcessing</readbox>
        <errorbox>testInbox.testNestedError</errorbox>
    </server2>
</configFile>
```

b. SDriveEmailAgentConfig.txt Configuration

Force.com Connectivity

URL	URL of the Force.com web services endpoint. Most customers do not need to change this.
USERNAME	Username of the Salesforce user who will create cases
PASSWORD	Password of the Salesforce user (may require security token appended)
LOGINREFRESH	How often should the code re-login to refresh the Salesforce session, in minutes.
TIMEOUT	The timeout to specify for the SOAP binding, in seconds. Default is 600.
com.sforce.mail.EmailService	Pointer to the SDriveEmailAgent.txt configuration file.

Notification Processing

NOTIFYEMAIL	Email address of person to send notification to in event of a problem. To send to multiple recipients, separate addresses by commas.
FROM	Sender address of above.
HOST	SMTP Host for Email, or is using Notification extensions this can be any other type of host you need.
PORT	SMTP Port for above host - optional. Default port 25 will be used if not provided.
USER	For SMTP, this is the user needed for SMTP to authenticate.

PASSWORD	For authentication, if needed.
SERVICE	The class to use for invoking notifications. The provided class, com.sforce.mail.SMTPNotification, is for sending Email notifications via SMTP. Another class is also provided for use with SMTP servers that require authentication (e.g. Yahoo, Hosted Mail Providers). This Class, com.sforce.mail.SMTPNotificationAuth does require the user and password parameters to be provided. The architecture is designed such that another class could be used in its place for other protocols as desired SMNP, JMX etc... To do this, subclass com.sforce.mail.Notification.

Large Attachment Processing

S-Drive has no size limitation for the attached files. All email attachments will be uploaded to S-Drive.

Important Note: In the latest version *largeAttachmentSize* configuration is removed and not supported anymore. All attachments will be uploaded to S-Drive.

largeAttachmentDirectory	This is the high level directory where you want to store the attachments. Subdirectories will be created each day an attachment is processed.
largeAttachmentURLPrefix	This is an obsolete parameter for S-Drive Email Agent. You can keep it as is in example config file.
deleteLocalFilesAfterSuccess	Set this **true**, if you want local files on the server to be deleted after successful upload to the S-Drive. If you set this to **false**, local files will be kept in their directories.

File Object Configuration

This configuration section is used to configure S-Drive Attachments' Case File objects.

fileObjectName	File object name of the attachment to be attached (default "CaseFile__c").
fileObjectNamespace	File object namespace of the attachment to be attached (default "cg__").
relationshipName	Relationship name between the file object and the parent object (default "Case__c").

General Config

This configuration section is used to configure some default configuration settings.

embed_links	Used to decide if S-Drive Attachment links will be embedded into e-mail messages or not. Default is "true".

Case Defaults

This configuration section is used to configure default case settings when an email with attachments is used to create a case. These settings do not apply to cases created by emails with no attachments.

status	Status field of the newly created field (default "Not Allocated").
origin	Origin field of the newly created field (default "Email").

Example #1 with authenticated SMTP:

```
<configFile>
    <sfdcLogin>
        <url>https://www.salesforce.com/services/Soap/u/20.0</url>
        <userName>TestUser@Company.com</userName>
        <password>MyPassword</password>
        <loginRefresh>30</loginRefresh>
        <timeout>600</timeout>
    </sfdcLogin>
    <notify>
        <notifyEmail>admin@your_company.com, E2CSupport@your_company.com</notifyEmail>
        <from>sample_user@your_company.com</from>
        <host>smtp.mail.your_company.com</host>
        <port>25</port>
        <user>sample_user</user>
        <password>123456</password>
        <service>com.sforce.mail.SMTPNotificationAuth</service>
    </notify>
    <attachments>
        <largeAttachmentDirectory>\\nfs-001\west\cases\</largeAttachmentDirectory>
        <largeAttachmentURLPrefix>file:\\nfs-001\west\cases\</largeAttachmentURLPrefix>
        <deleteLocalFileAfterSuccess>true</deleteLocalFileAfterSuccess>
    </attachments>
    <objects>
        <fileObjectName>CaseFile__c</fileObjectName>
        <fileObjectNamespace>cg__</fileObjectNamespace>
        <relationshipName>Case__c</relationshipName>
    </objects>
    <general_config>
        <embed_links>true</embed_links>
    </general_config>
    <case_defaults>
        <status>Not Allocated</status>
        <origin>Email</origin>
    </case_defaults>
    <services>
        <com.sforce.mail.EmailService>C:\\SDriveEmailAgent\\SDriveEmailAgent.txt
        </com.sforce.mail.EmailService>
    </services>
</configFile>
```

Example #2 without authenticated SMTP:

```
<configFile>
    <sfdcLogin>
        <url>https://www.salesforce.com/services/Soap/u/20.0</url>
        <userName>TestUser@Company.com</userName>
        <password>MyPassword</password>
        <loginRefresh>30</loginRefresh>
        <timeout>600</timeout>
    </sfdcLogin>
```

```
<notify>
    <notifyEmail>admin@your_company.com, E2CSupport@your_company.com</notifyEmail>
    <from>sample_user@your_company.com</from>
    <host>smtp.mail.your_company.com</host>
<port>25</port>
    <user>sample_user</user>
    <password>123456</password>
    <service>com.sforce.mail.SMTPNotification</service>
</notify>
<attachments>
    <largeAttachmentDirectory>\\nfs-001\west\cases\</largeAttachmentDirectory>
    <largeAttachmentURLPrefix>file:\\nfs-001\west\cases\</largeAttachmentURLPrefix>
    <deleteLocalFileAfterSuccess>true</deleteLocalFileAfterSuccess>
</attachments>
<objects>
    <fileObjectName>CaseFile__c</fileObjectName>
    <fileObjectNamespace>cg__</fileObjectNamespace>
    <relationshipName>Case__c</relationshipName>
</objects>
<case_defaults>
    <status>Not Allocated</status>
    <origin>Email</origin>
</case_defaults>
<services>
    <com.sforce.mail.EmailService>C:\\SDriveEmailAgent\\SDriveEmailAgent.txt
    </com.sforce.mail.EmailService>
</services>
</configFile>
```

c. S-Drive Configuration

You need to update two S-Drive Configurations to use SDriveEmailAgent: *EmbedThreadIdInCaseEmail* and *CaseEmailReplyToAddress*. In order to make the proper configurations make sure to add the S-Drive Configuration to the list of Administrator's tabs.

Embed Thread Id In Case Emails

This configuration option is used to put the thread id into your email body for case emails for the emails that you send using '*Email Selected*' button in Case Files. So, if customer replies your email with some attachments these attachments will be attached to the appropriate case.

Case Email Reply-To Address

This configuration option is used to set the reply to address for case emails. You need to set this configuration same as the support email you set for Email2Case (routing address). If you do not specify this option, reply emails will be sent to the email address of the user who sent the email to the customer and SDriveEmailAgent won't be able to process the emails that are not sent to the routing address.
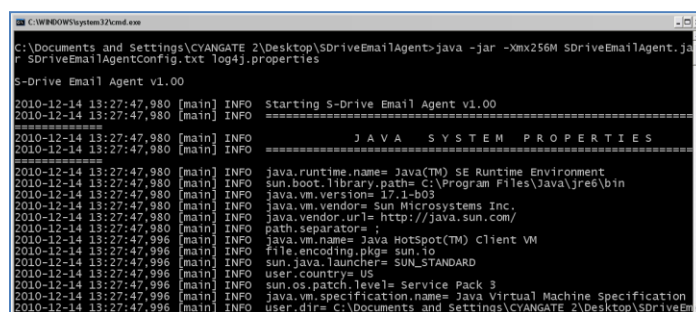
Important Note 1: If you installed "SDriveEmailAgent" as a windows service you can skip this section. You won't be able to display progress using the command line screens shown in this section. Instead you need to inspect the log files under the ***$Local\SDriveEmailAgent\logs*** directory.

Important Note 2: If you do not plan to use "SDriveEmailAgent" as a windows service, you need to delete ***$Local\SDriveEmailAgent\log4j.properties*** and rename ***$Local\SDriveEmailAgent\log4j.properties-STANDALONE*** file to ***$Local\SDriveEmailAgent\log4j.properties*** to enable SalesforceAgent.log file.

Important Note 3: *If you are in one of Salesforce.com's **na0 (ssl)** prefixed organization, non-latin1 characters in your email attachment file names will be converted to underscores (_).*

To run the S-Drive Email Agent, on Windows you can use the supplied bat file **SDriveEmailAgent.bat** and the agent will start polling your mail server.

While the agent is running, it will log messages to the console and to a text file in the $Local\SDriveEmailAgent\ directory called **SalesforceAgent.log** (Figure 13). Settings for logging can be set in **log4j.properties** file in the same directory. For instance, you can turn off logging to the console entirely by commenting out the CONSOLE section in this file. It is also possible to change the file name for the log file in the LOGFILE section. For more information on how to customize logging, consult the log4j documentation at http://logging.apache.org/log4j/docs/documentation.html

After displaying **"processing X messages"** message (Figure 13), your service is up and running. Leave the window open and the application running to process your messages and upload attachments to S-Drive.

Figure 13

5. Testing the S-Drive Email Agent Service

a. After running the service, you can send a message to your configured support email to see if it is working. Create an email message in your email client, attach a file to your message and send it to your support mail that you configured in **SDriveEmailAgent.txt** file (Figure 14).
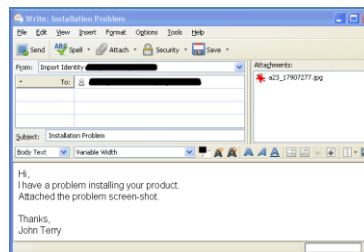

Figure 14

b. After sending your email, based on the interval you set, application will process the emails and upload the attachments to the related case (Figure 15).

Figure 15

c. Now, if you login to the account that you set in **SDriveEmailAgentConfig.txt** file's **<sfdclogin>** tag, you'll see a new case is created along with the attached S-Drive attachments. Note that the file name is prepended with timestamp to prevent naming collisions (Figure 16).
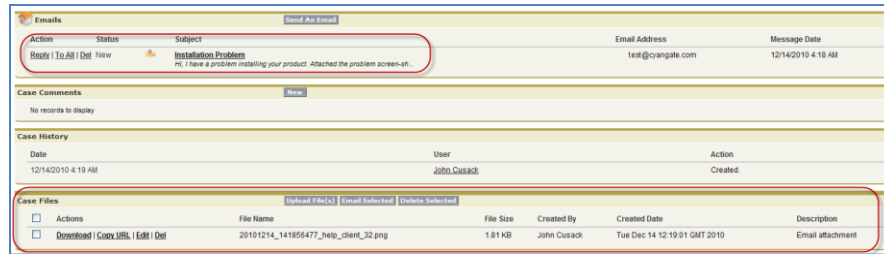
Figure 16

d. You can also display email details by clicking "Emails" page block's related email subject (Figure 17-A). In the opening page you can see the message details and attachment URL (Note that adding attachment links to the email can be disabled using SDriveEmailAgentConfig.txt configuration). You can also click "Click here to view HTML version" text to display HTML version of the email (Figure 17-B).
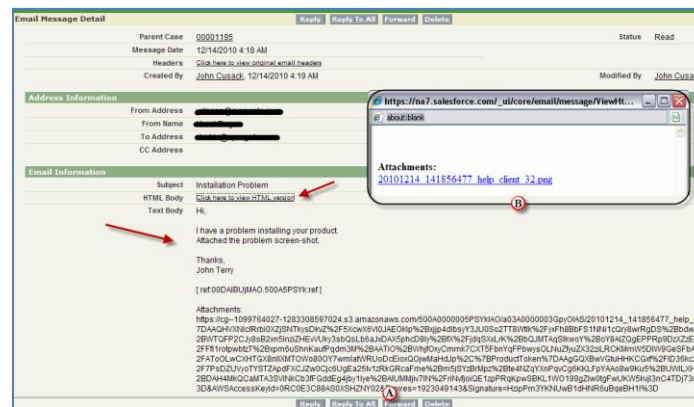

Figure 17

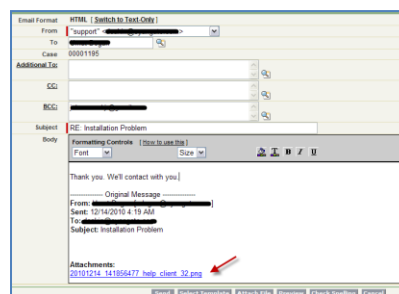e. You can reply or forward the email along with the attachments (Figure 18).

Figure 18

f. Also if the user attaches other attachments and replies back to you, these new attachments and email messages are attached to the old case (Figure 19-A and Figure 19-B). Auto generated thread id (**[ref: XYZ.XYZ:ref]**) inside email subject/body is important to track emails, so do not delete thread id for the forwarded/replied mails.

Figure 19

B. S-Drive Support

You can contact S-Drive Support team for any questions or problems that you couldn't solve using S-Drive documents:

1.   Open a Ticket at Support Site: sdriveapp.com/support

2.   Email: sdrive@sdriveapp.com

You can find up-to-date product information, documents, tutorial videos, tools in our web page: www.sdriveapp.com