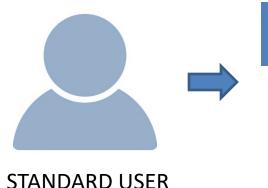
Integrate and Customize File Manager Project Specification

PROJECT SPECIFICATION

BASIC FUNCTIONAL OVERVIEW



Standard User Completes Basic Application Form



Basic Application Form



PARTNER USER

Insert Task (Deal) record in

TaskBoard Table

Insert Access Code record in

bizVAULT Access Table



PARTNER DASHBOARD

Partner granted temporary access to Standard User "Basic"

FUNDING REQUEST TABLE

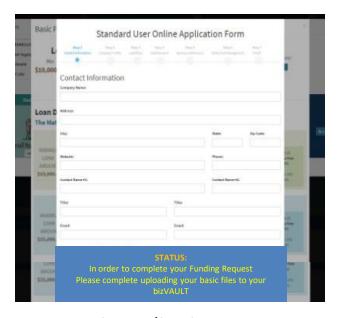
Funding Request ID
Standard User ID
Funding Amount Requested
Funding Type
Partner ID
Standard User bizVAULT Access Code

Standard User's
bizVAULT Status must be
"Basic Files Upload Complete

Standard User bizVAULT



STANDARD USER



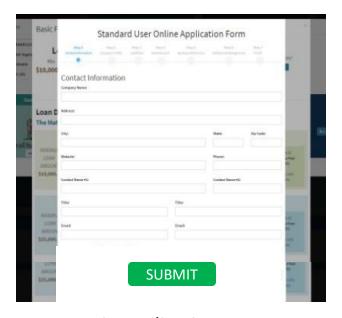
Basic Application Form

CODING NOTE:

Basic Application Form
CAN ONLY BE SUBMITTED
After Standard User's bizVAULT Status is
"BASIC FILES UPLOAD COMPLETE"



STANDARD USER



Basic Application Form

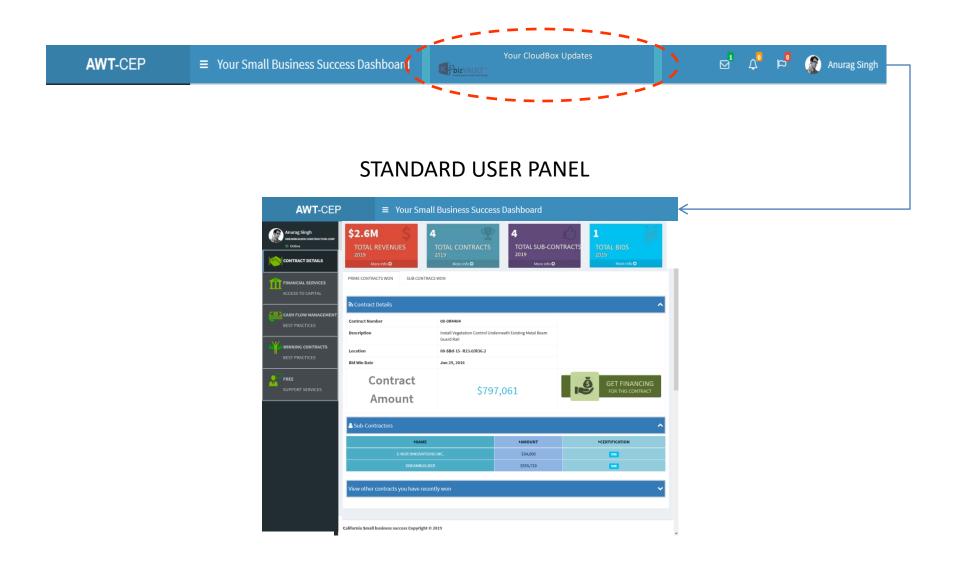
CODING NOTE:

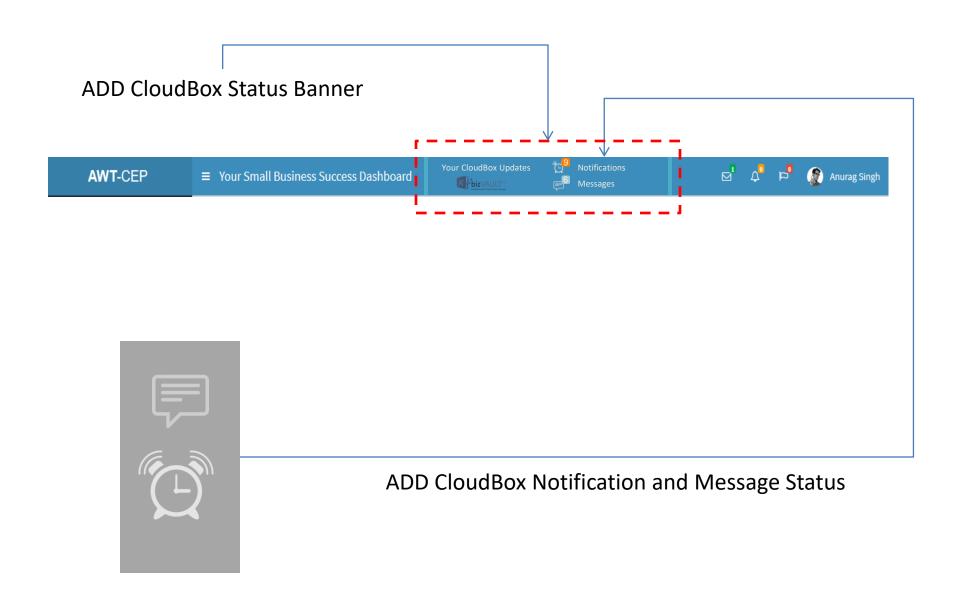
Display FORM SUBMIT BUTTON when Standard User's bizVAULT Status is "BASIC FILES UPLOAD COMPLETE"

CODING TASK 0702-001 UPDATE/MODIFY BANNER ICONS

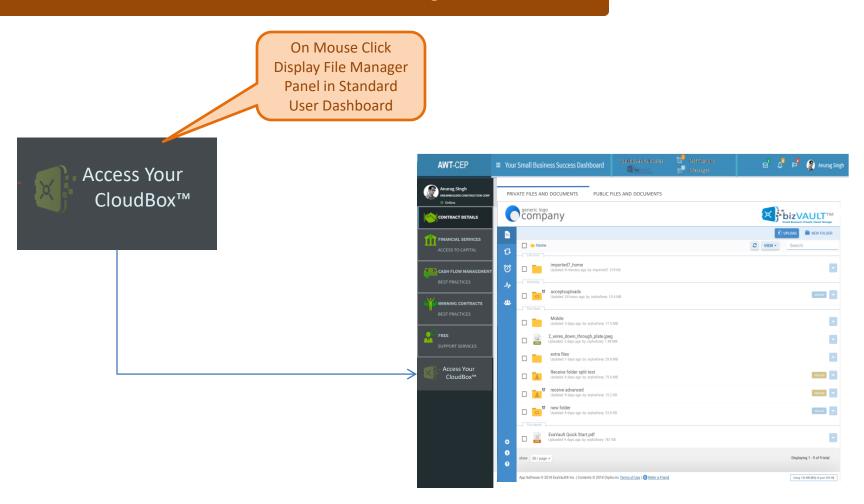
ADD FILE MANAGER ACCESS AND NOTIFICATION BUTTONS

Standard User Dashboard Panel





Add Link and Enable CloudBox Side Panel Navigation Button

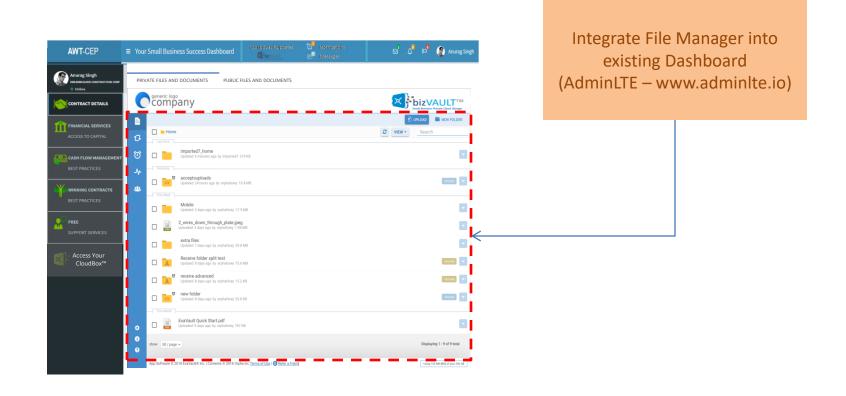


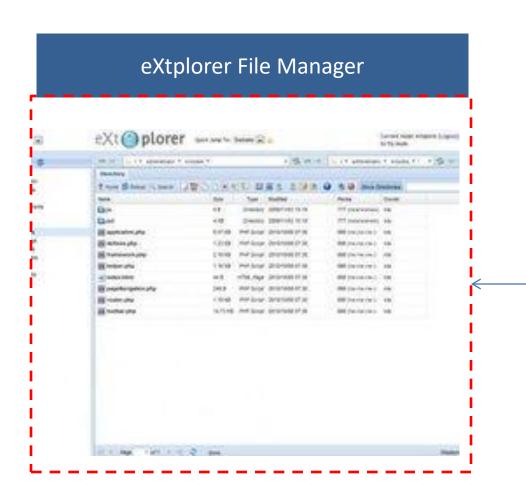
CODING TASK 0702-002

INTEGRATE FILE MANAGER INTO DASHBOARD

INTEGRATE FILE MANAGER INTO ADMINLTE DASHBOARD TEMPLATE

Add CloudBox Side Panel Navigation Button



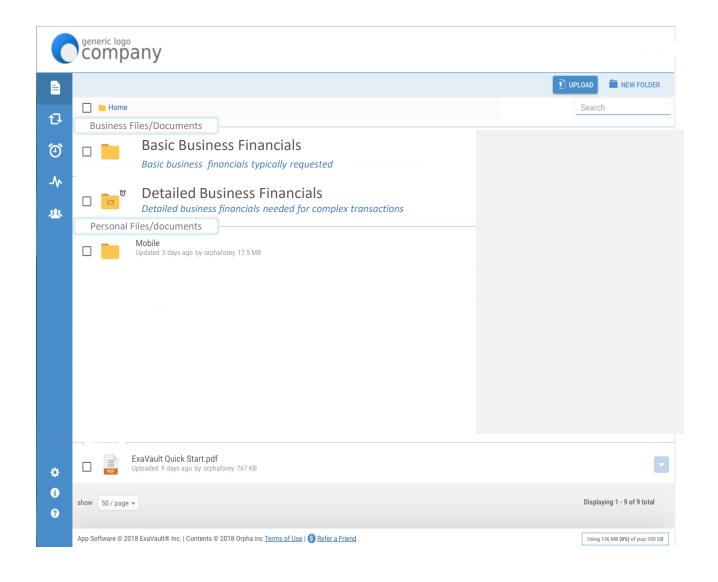


<u>exTplorer File Manager</u> Customize File Manager User Interface

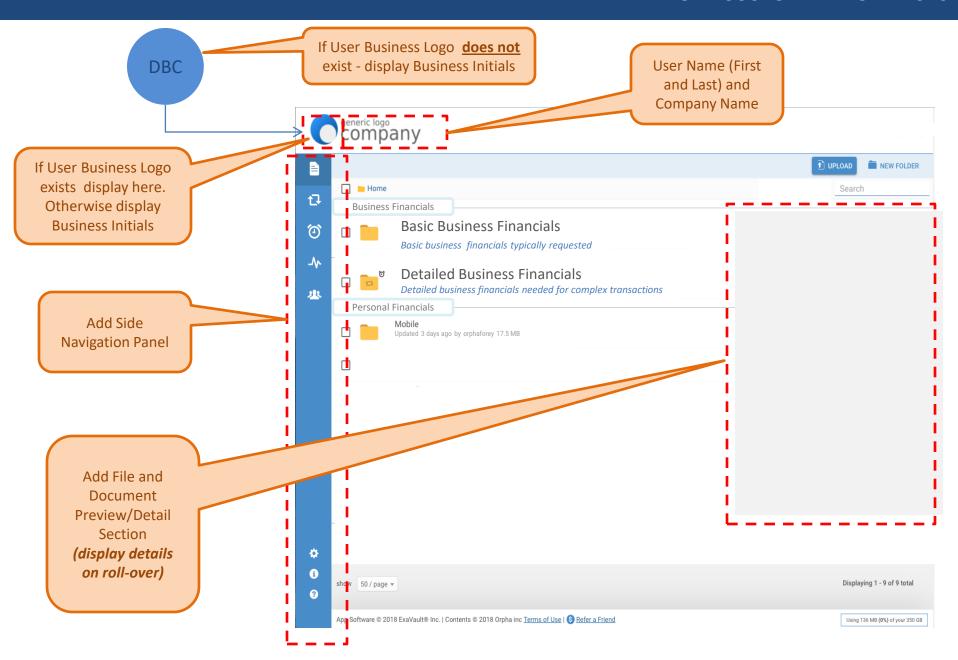
CODING TASK 0702-003

CUSTOMIZE/MODIFY FILE MANAGER USER INTERFACE

ADD SIDE NAVIGATION AND UI ELEMENTS TO FILE MANAGER

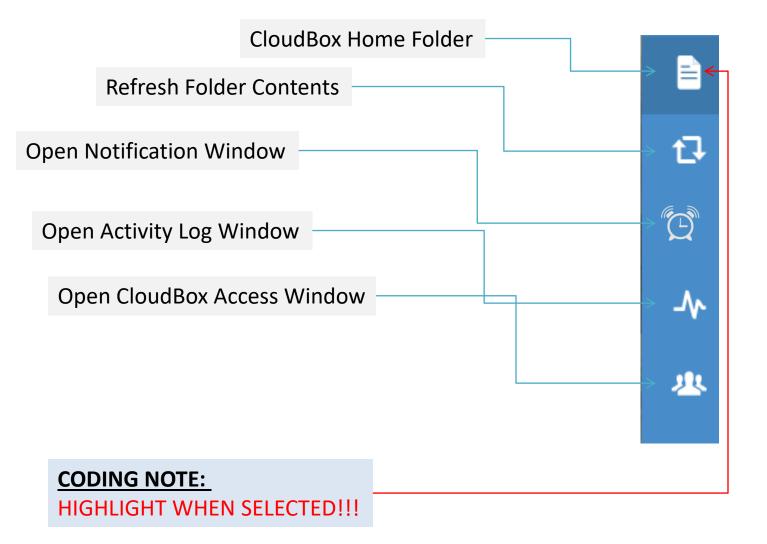


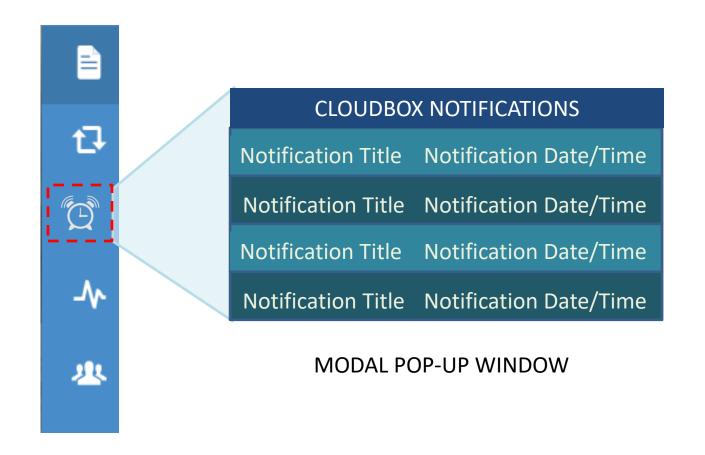
FILE MANAGER CUSTOMIZATION TASKS

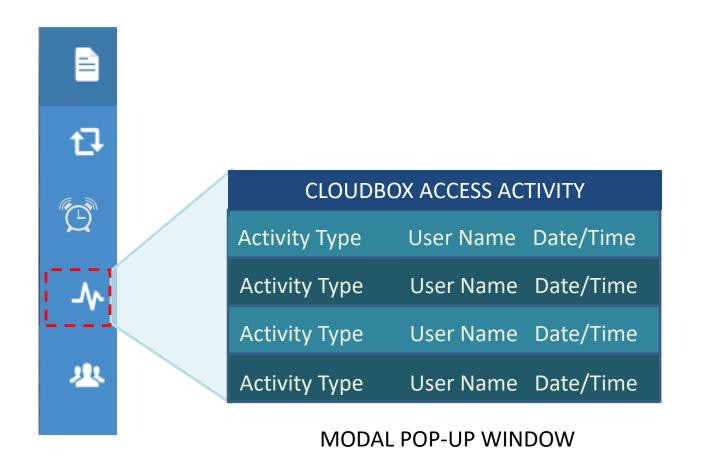


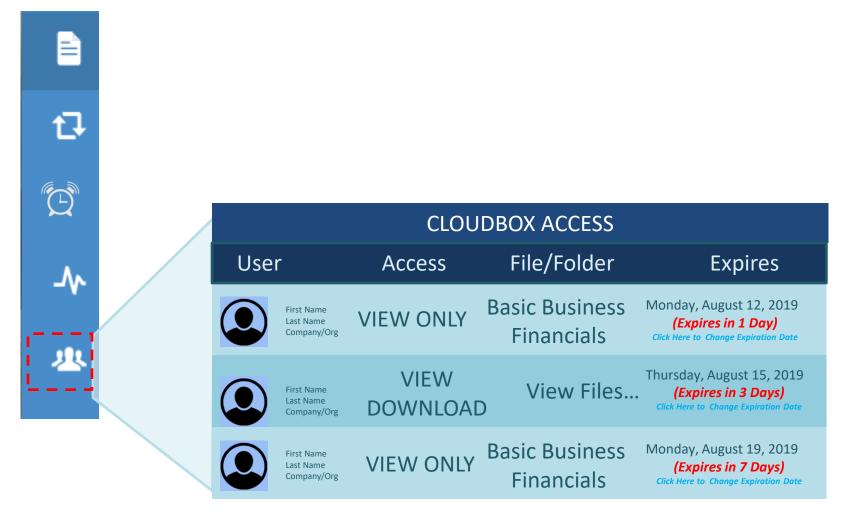
File Manager Side Navigation

- CloudBox Home Folder
 - Displays Home Folder
- Refresh Folder Contents
 - Update/Refresh Folder Contents
- Open Notification Window
 - Display Access/Activity Notifications
- Open Activity Log Window
 - Display File/Document Activity Log
- Open CloudBox Access Window
 - Display File/Document Access/Permissions Granted









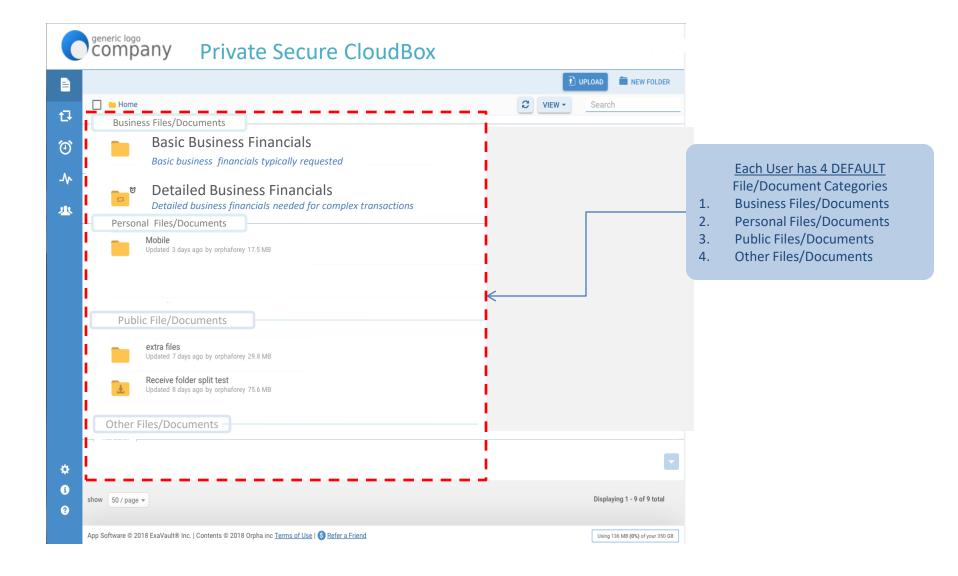
MODAL POP-UP WINDOW

CODING TASK 0702-004

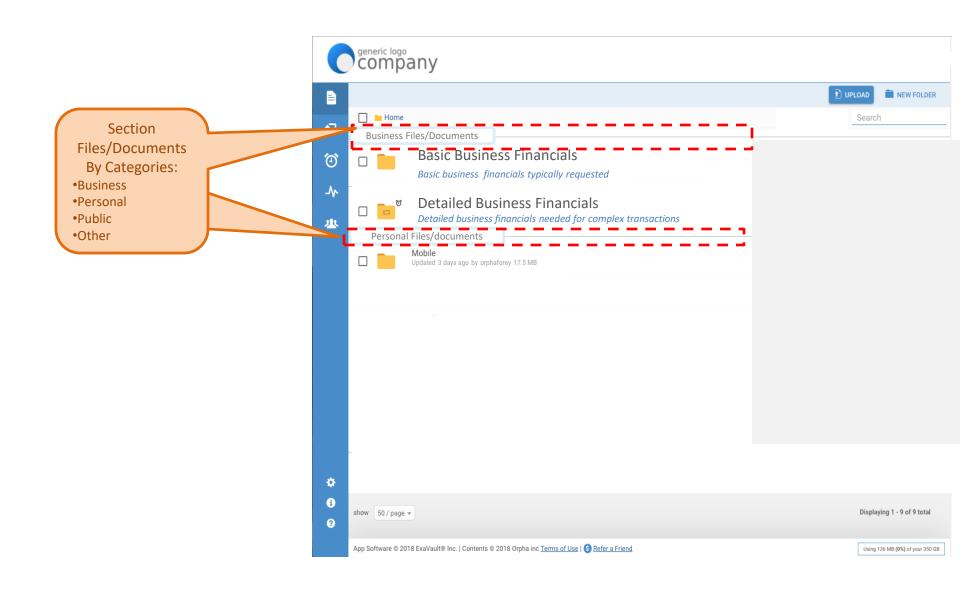
FILE MANAGER DYNAMIC UI LAYOUT

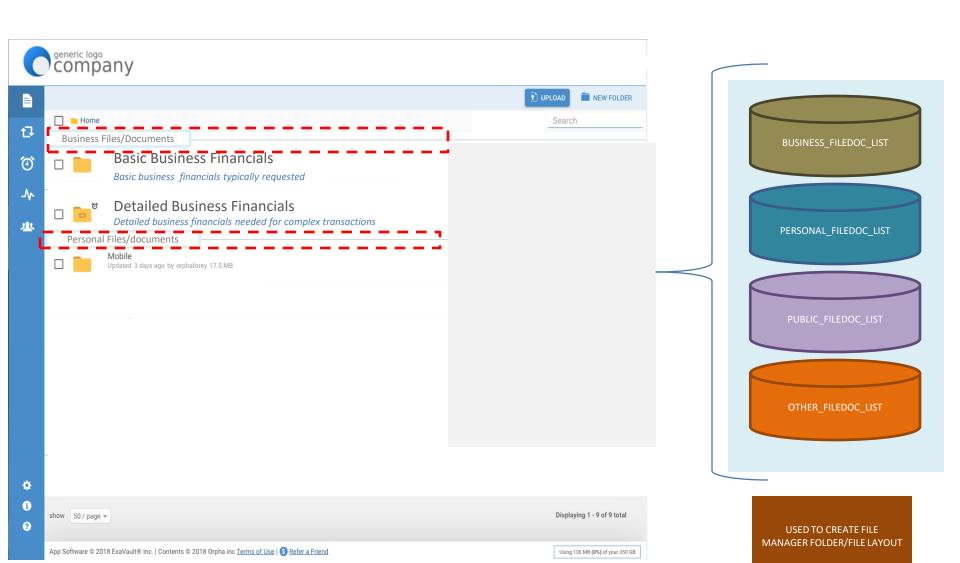
USE "FILEDOC_LIST" TABLES TO AUTO GENERATE FILE MANAGER LAYOUT

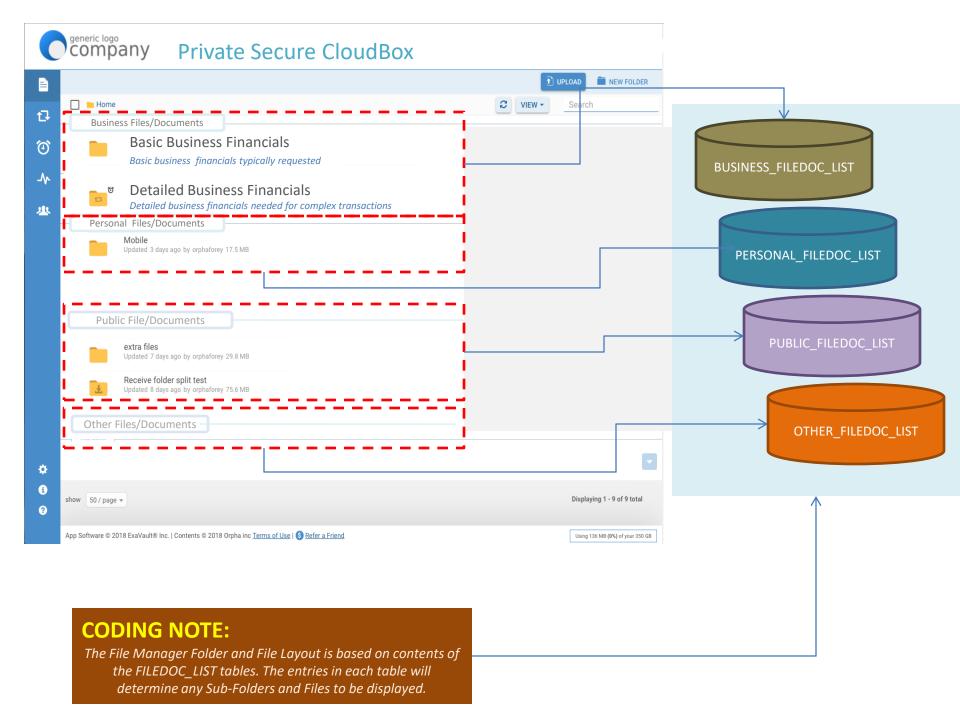
Display Folder/File Info on Mouse Rollover

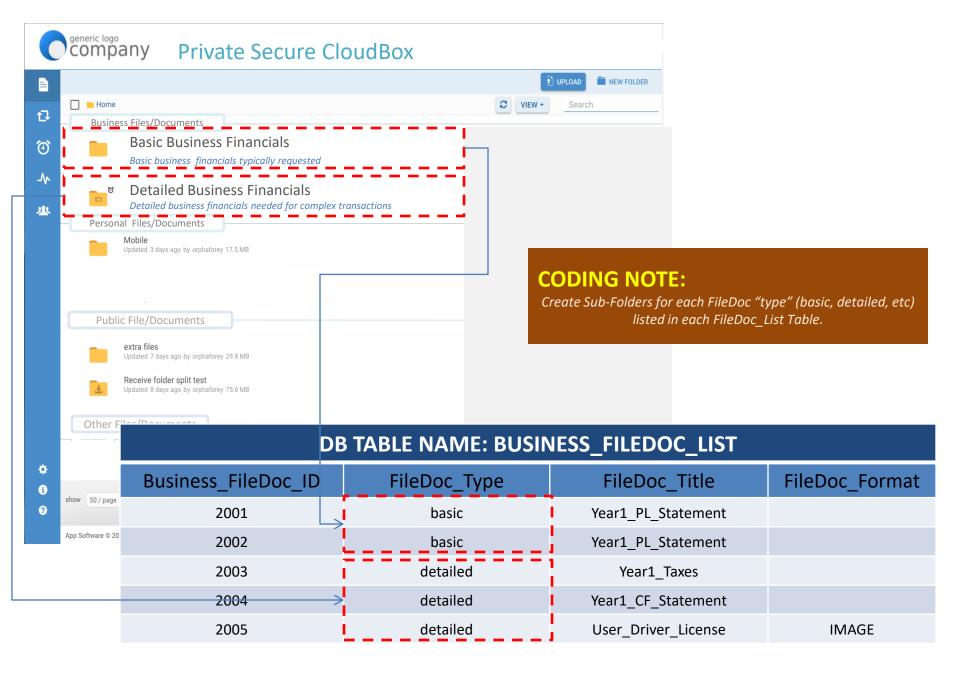


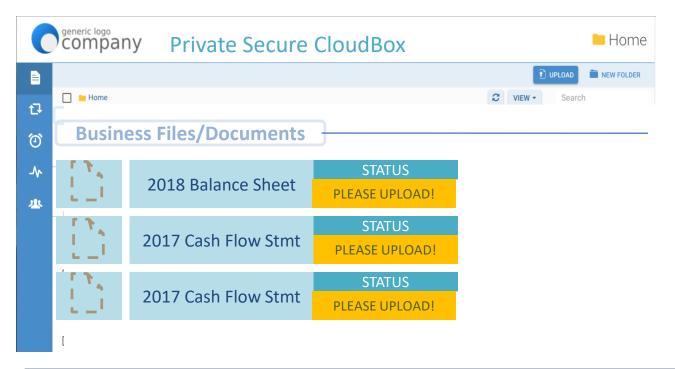
FILE MANAGER CUSTOMIZATION TASKS





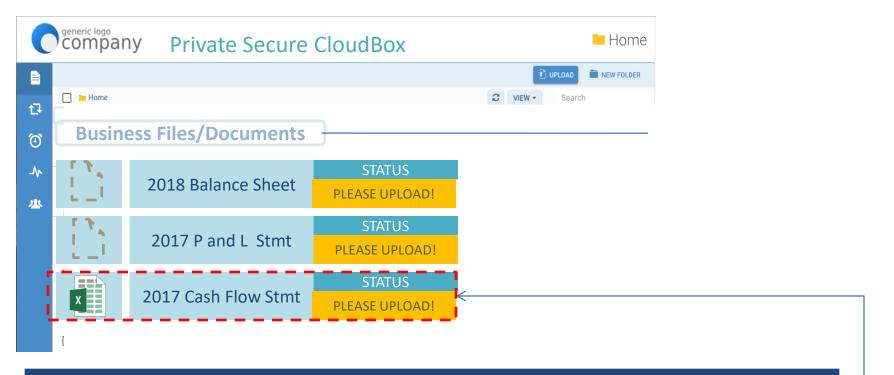






But if FileDoc_Format field has format (such as xlsx, docx, pdf, image, etc) then User **MUST** upload the listed file format.

DB TABLE NAME: BUSINESS_FILEDOC_LIST FileDoc_Format Business FileDoc ID FileDoc Type FileDoc Title 2001 basic Year1 PL Statement 2002 basic Year1 PL Statement detailed 2003 Year1 Taxes 2004 detailed **XLSX** Year1_CF_Statement 2005 detailed User Driver License **CODING NOTE:** If FileDoc Format field is **EMPTY** then ANY file type is allowed.



DB TABLE NAME: BUSINESS_FILEDOC_LIST

Business_FileDoc_ID	FileDoc_Type	FileDoc_Title	FileDoc_Format
2001	basic	Year1_PL_Statement	
2002	basic	Year1_PL_Statement	
2003	detailed	Year1_Taxes	
2004	detailed	Year1_CF_Statement	XLSX
2005	detailed	Year1_CF_Statement	<u> </u>

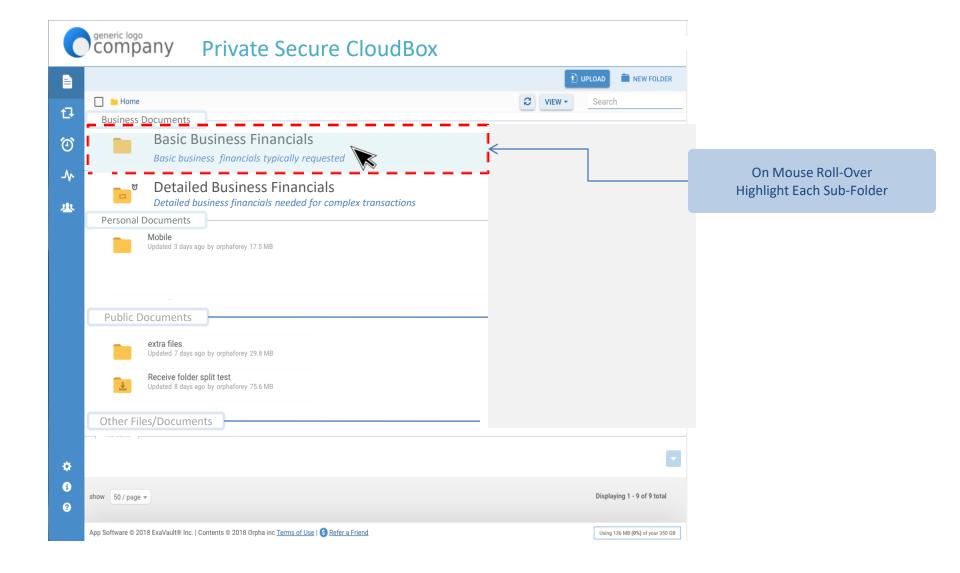
CODING NOTE:

If FileDoc_Format field is <u>EMPTY</u> then ANY file type is allowed. But if FileDoc_Format field has format (such as xlsx, docx, pdf, image, etc) then User <u>MUST</u> upload the listed file format.

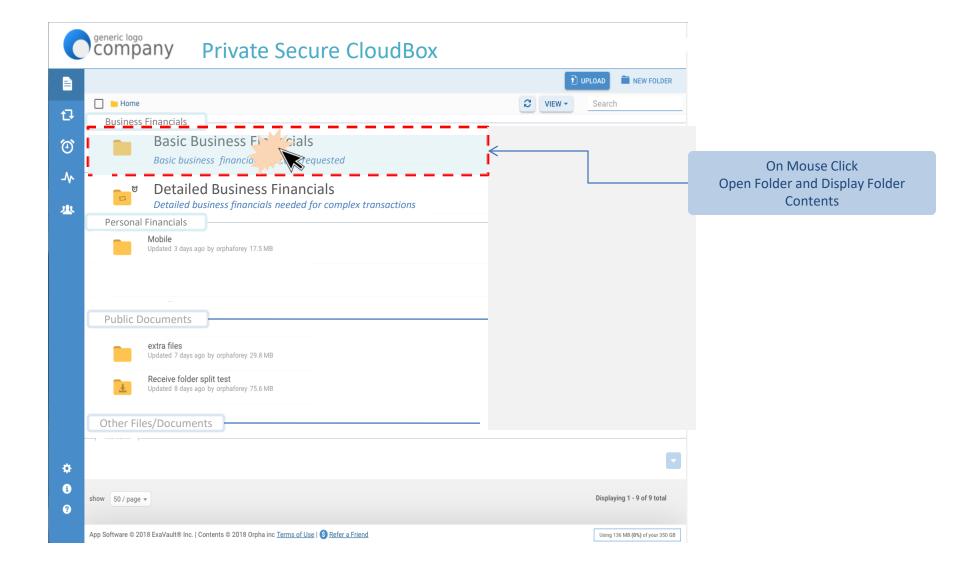
CODING TASK 0702-005 FILE MANAGER USER INTERACTION AND

FILE MANAGER UI BEHAVIOUR

Display Folder/File Info on Mouse Rollover



Display Folder/File Info on Mouse Rollover



CODING TASK 0702-006

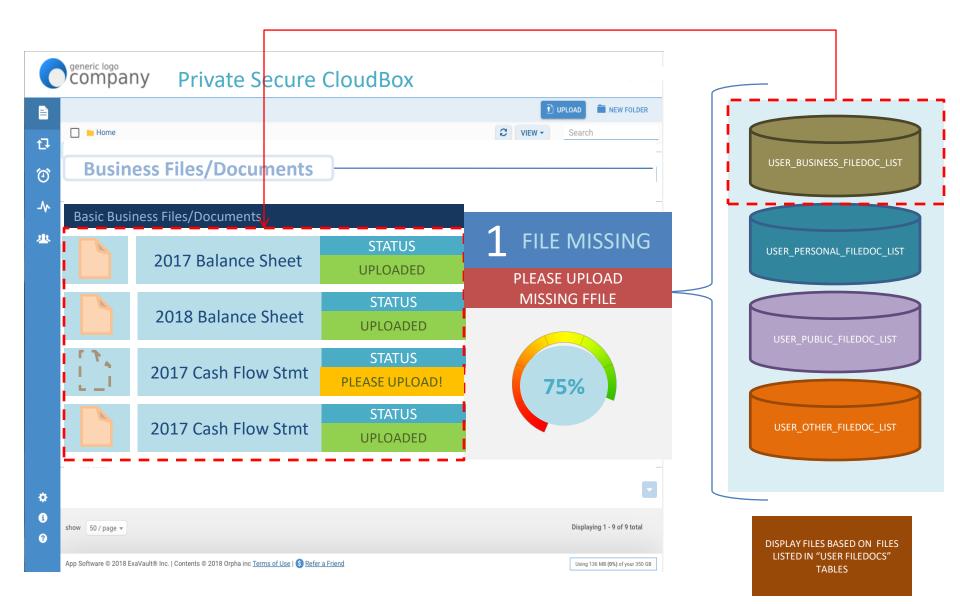
ADD DOCUMENT/FILE STATUS TO FILE MANAGER USER INTERFACE

FILE MANAGER FILE/DOCUMENT UI ELEMENTS

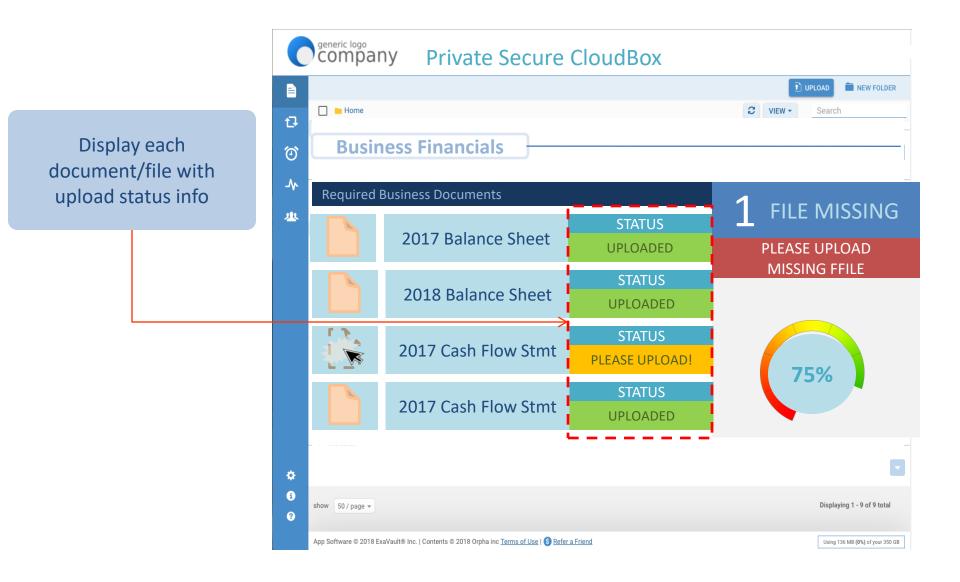
Display Folder/File Info on Mouse Rollover



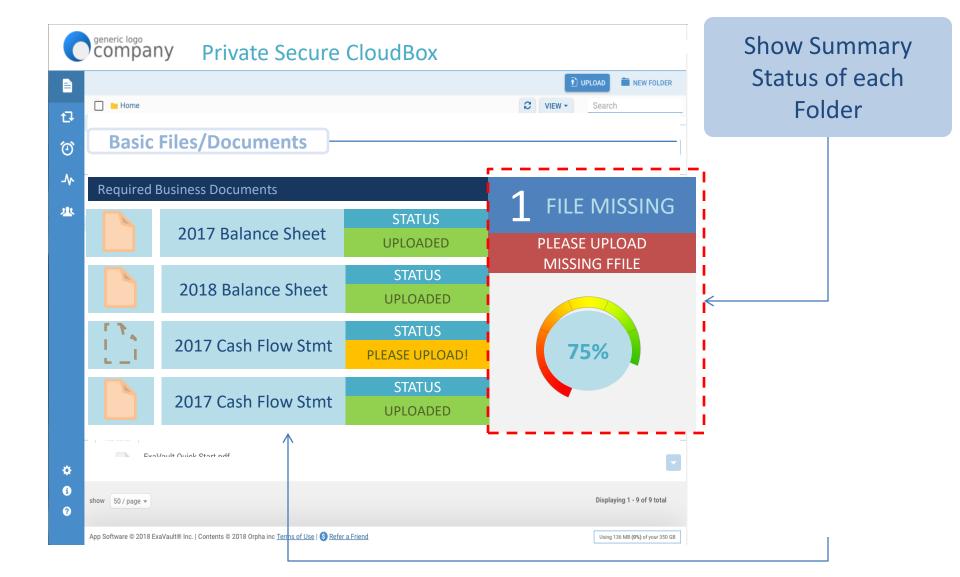
Display Files and Documents stored in User's "FileDoc" Tables



Display Each File/Document Upload Status



Display Folder File Upload Status Info



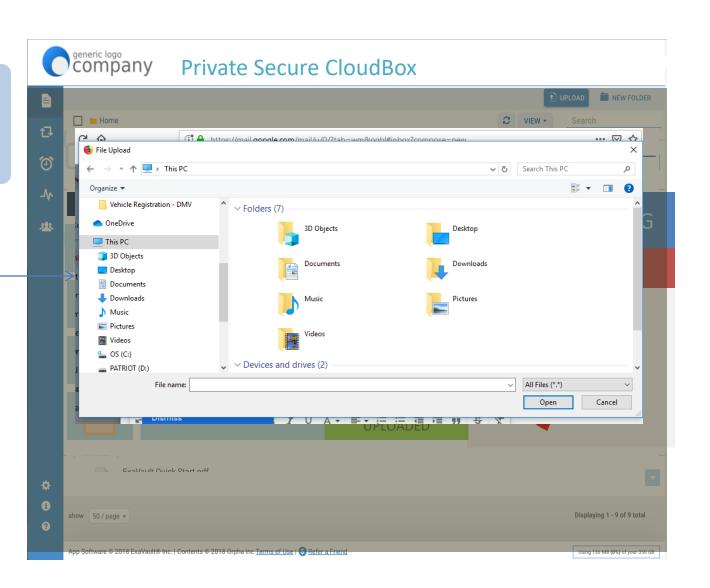
Click Empty Document Icon to Upload a missing File/Document

generic logo Company Private Secure CloudBox On Mouse Click NEW FOLDER Display File Upload ☐ Home € VIEW ▼ 乜 PopUp Window **Business Financials ①** ₩ **Required Business Documents** FILE MISSING 122 **STATUS** 2017 Balance Sheet PLEASE UPLOAD **UPLOADED** MISSING FFILE **STATUS** 2018 Balance Sheet **UPLOADED STATUS** 2017 Cash Flow Stmt PLEASE UPLOAD! **75% STATUS** 2017 Cash Flow Stmt **UPLOADED** Eval/ault Ouigk Start ndf 4 0 show 50 / page ▼ Displaying 1 - 9 of 9 total 0 App Software @ 2018 ExaVault® Inc. | Contents @ 2018 Orpha inc Terms of Use | S Refer a Friend Using 136 MB (0%) of your 350 GB

FILE MANAGER CUSTOMIZATION TASKS

Upload File to CloudBox

Allow for direct upload or "drag and drop" from local computer



FILE MANAGER CUSTOMIZATION TASKS

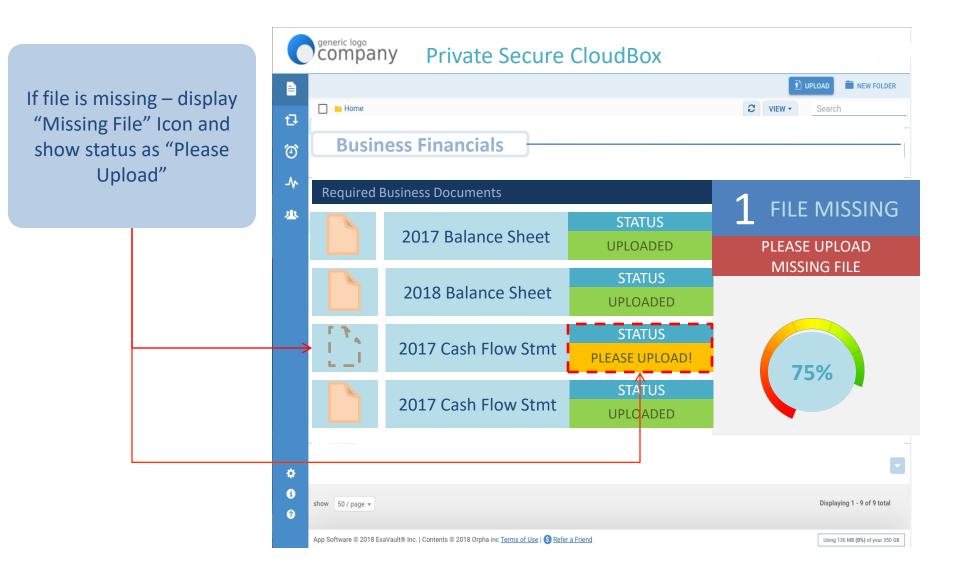


CODING TASK 0702-007

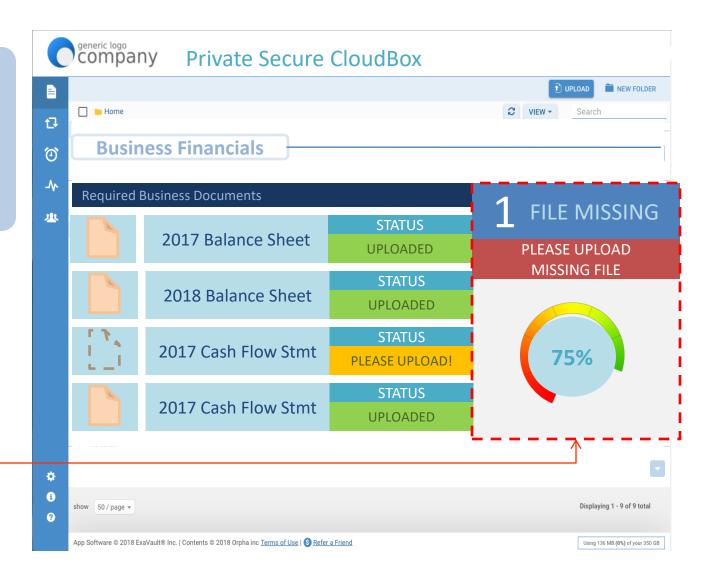
File Manager File Upload User Interface

FILE MANAGER FILE/DOCUMENT UPLOAD

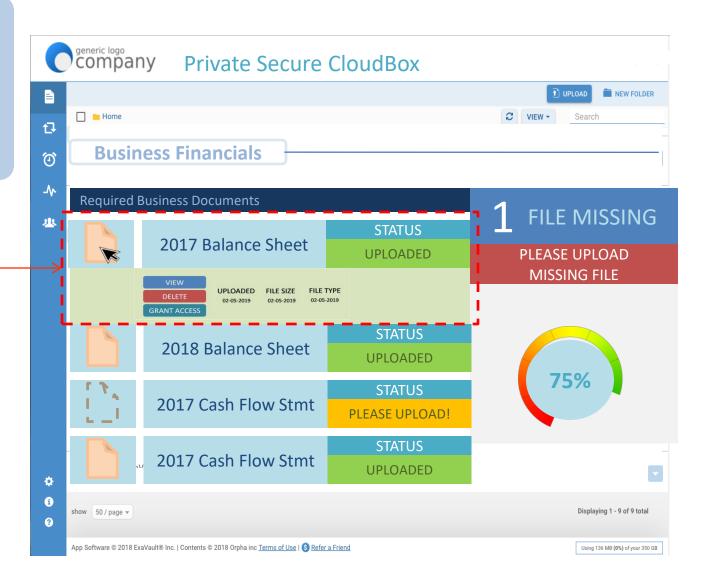


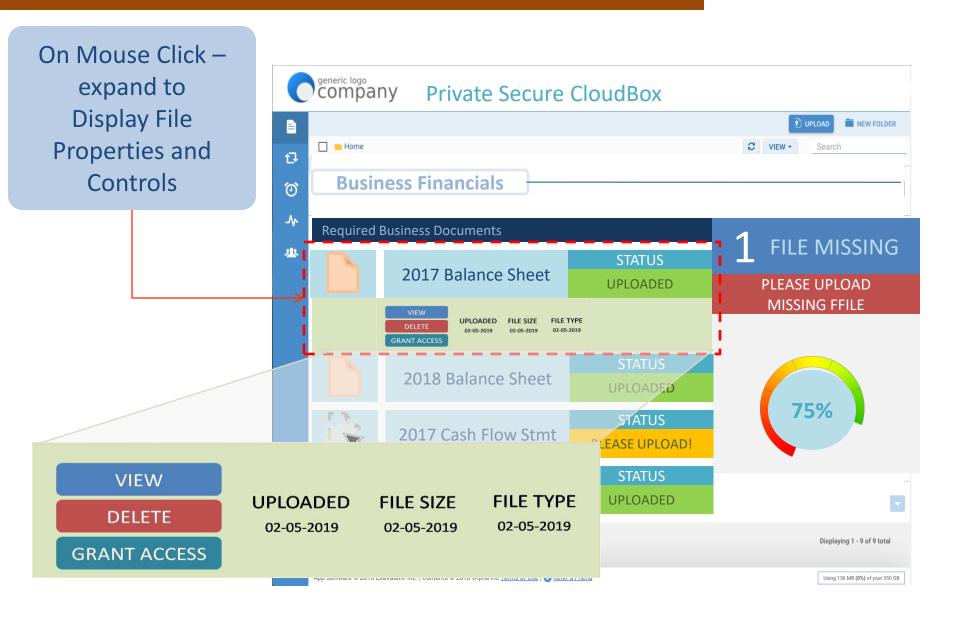


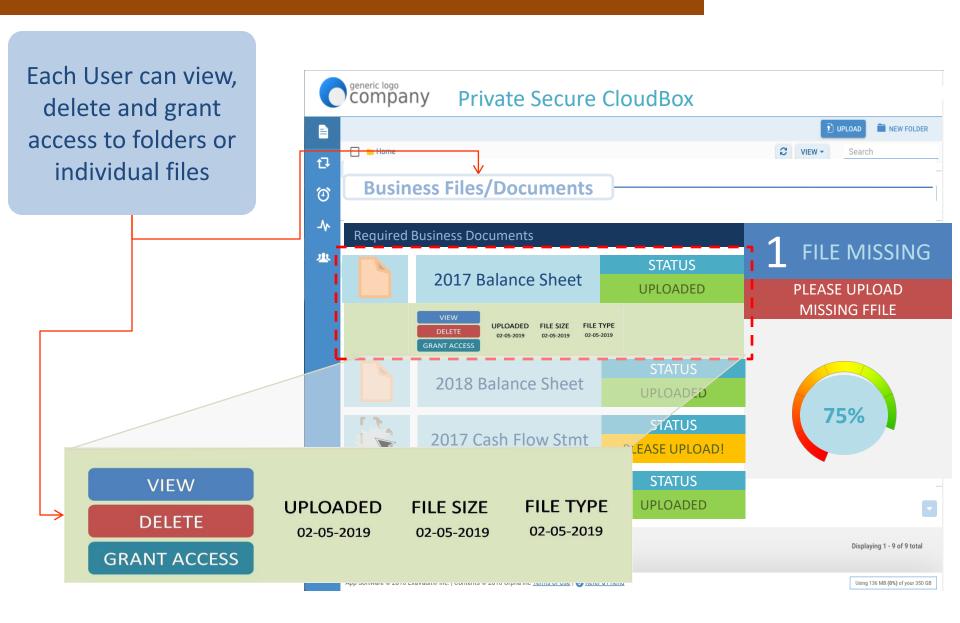
Show status summary for each Folder along with *number of files missing* and *percent completed graph*



On Mouse Click –
expand to
Display File
Properties and
Access Controls







CODING TASK 0702-008

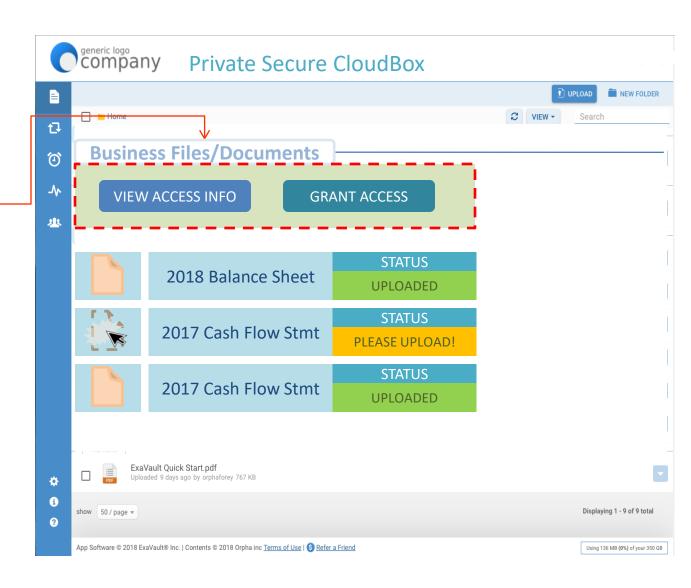
Customize File Manager User Interface

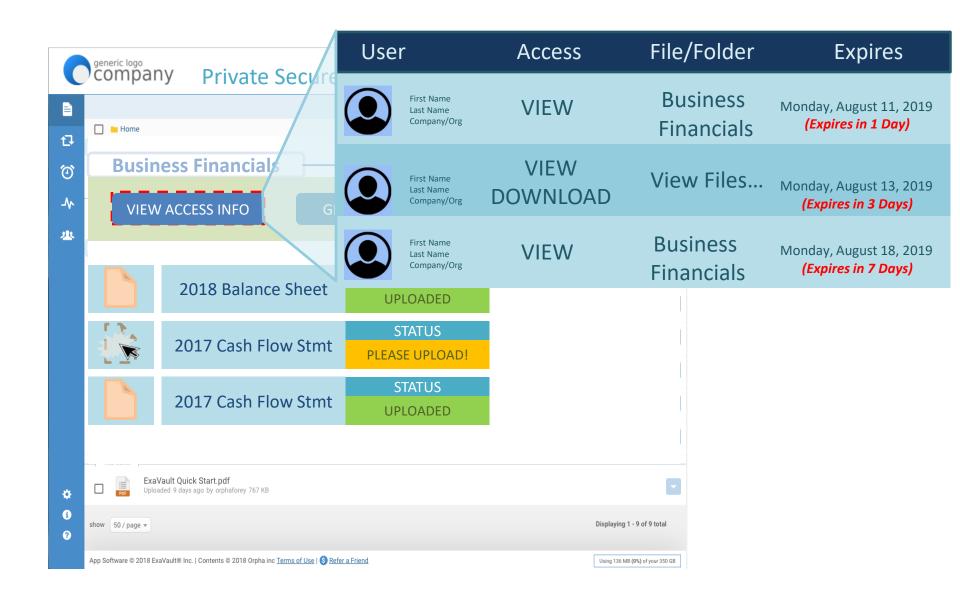
FILE MANAGER FILE/DOCUMENT ACCESS, STATUS AND DETAIL INFO

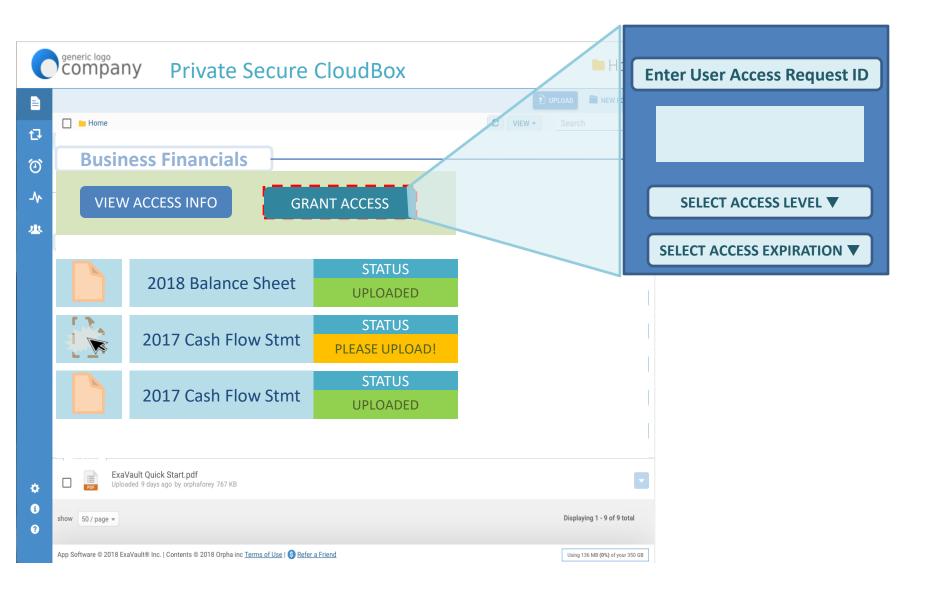
FILE MANAGER CUSTOMIZATION TASKS

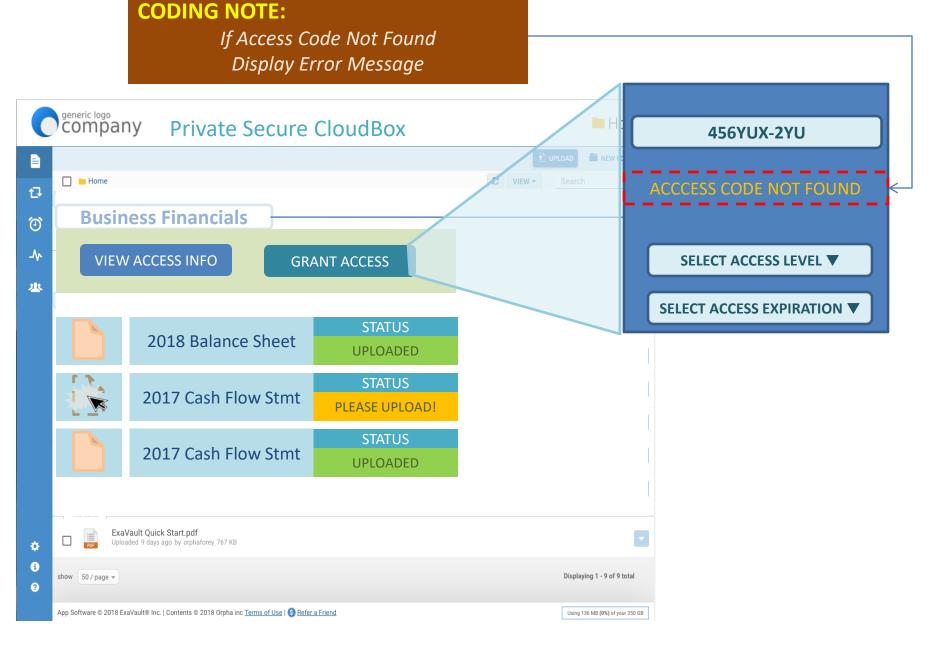
Folder Access Controls

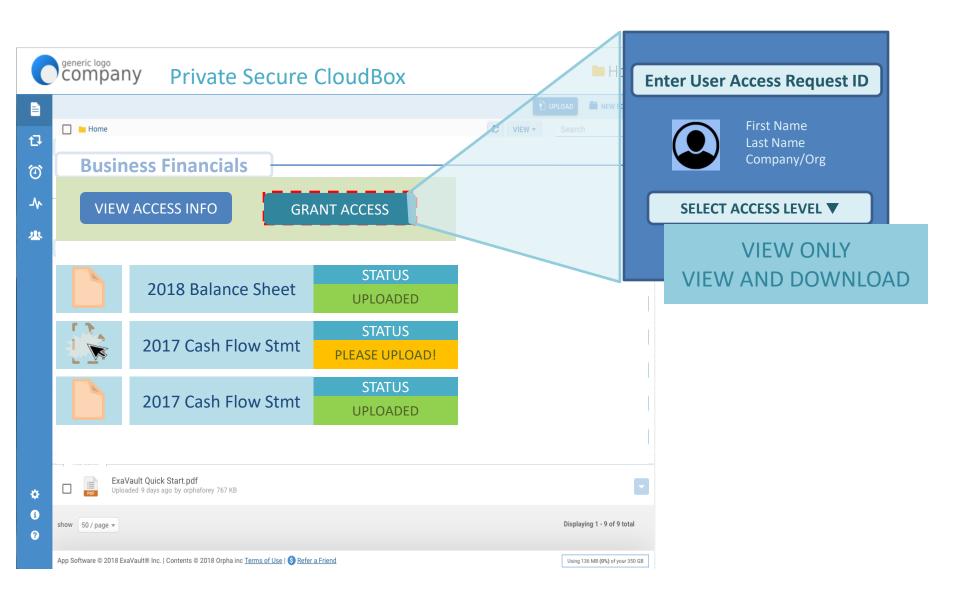
On *Folder m*ouse click, display Folder Access
Menu (*View Access and Grant Access*)

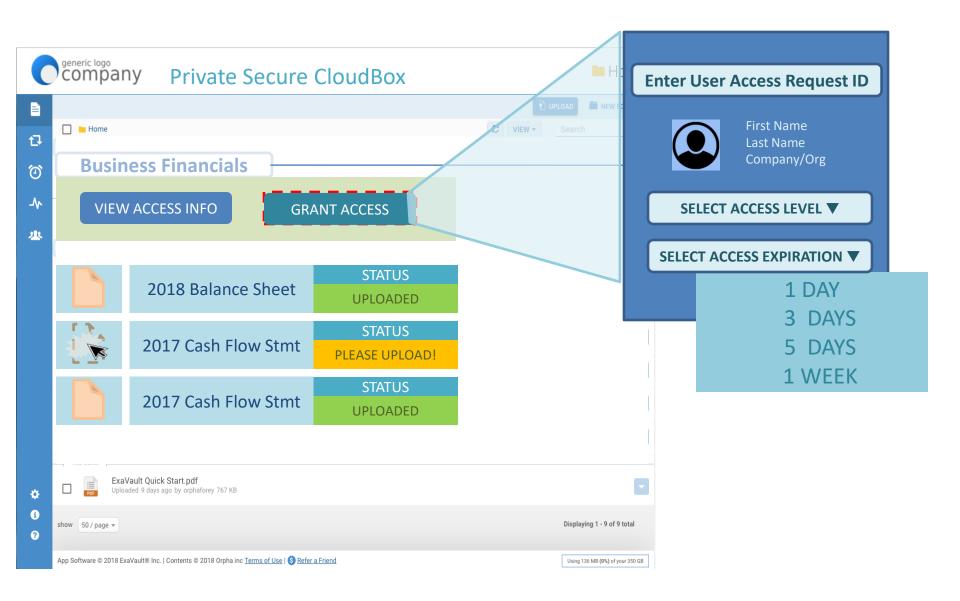


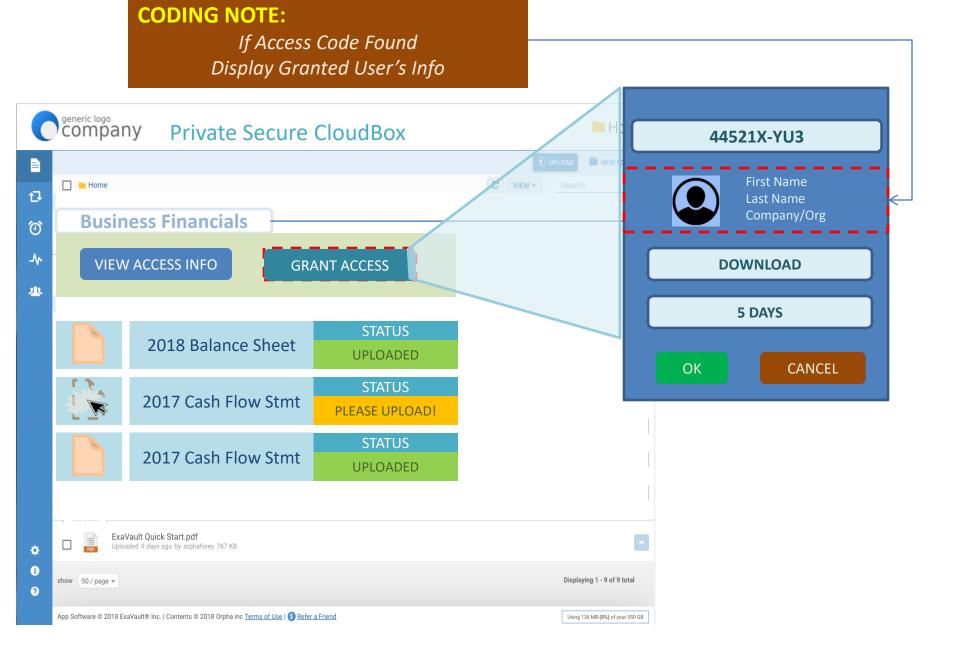


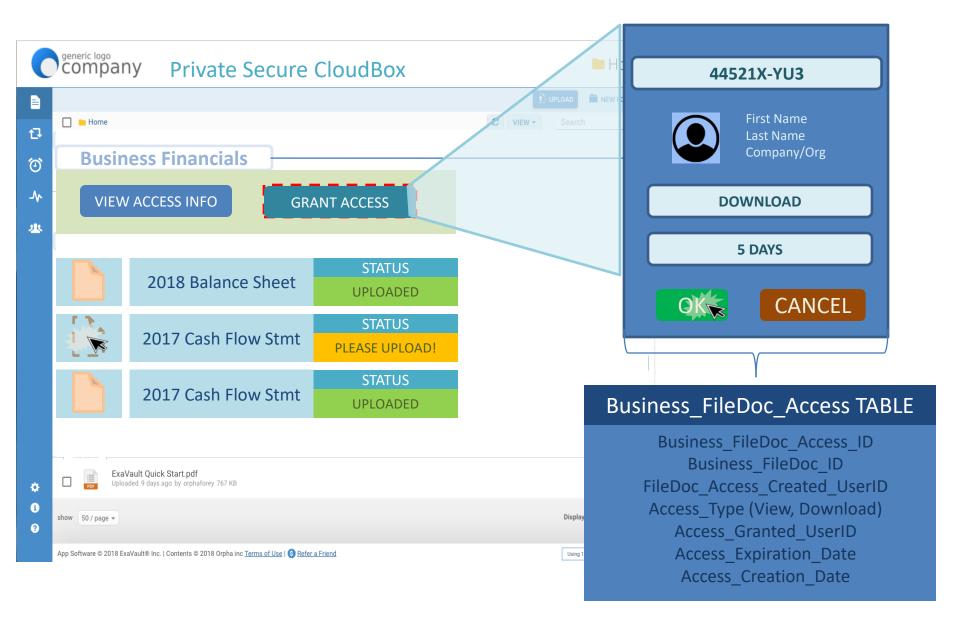












File Manager Cloud Storage

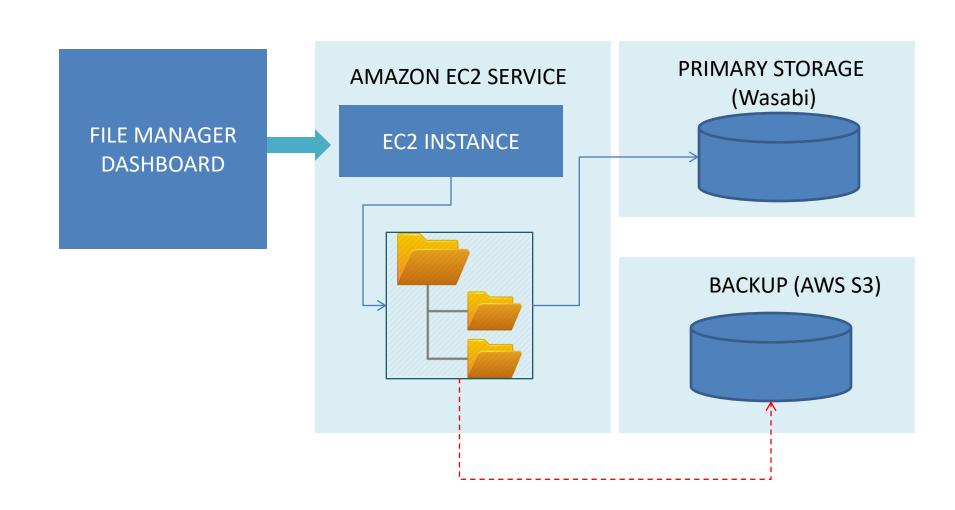
BACKEND CLOUD STORAGE INTEGRATION (WASABI/AWS S3)

CloudBox File Storage

- File storage for each user's CloudBox will use AWS S3 and Wasabi Storage Services
- Amazon AWS EC2 will be used to access Cloud Storage
- WASABI will serve as Primary Storage
- AWS S3 will serve as BackUp Storage

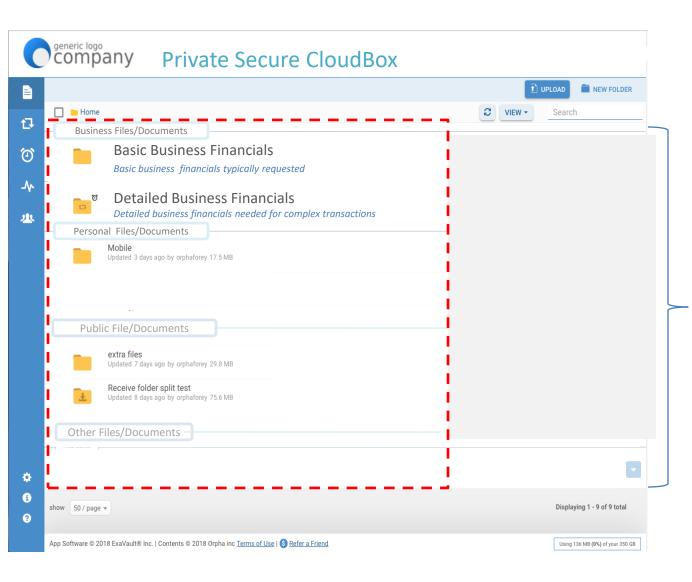
CODING AND CONFIGURATION NOTE:

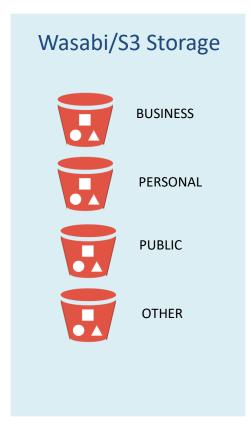
 Cloud Storage access control will be implemented via File Manager Front-end and associated DB tables. There is no need to implement access control on Cloud Storage as the File Manager User Interface will be used to implement and manage file permissions and access.



File Manager CLOUD STORAGE OBJECTS AND DB

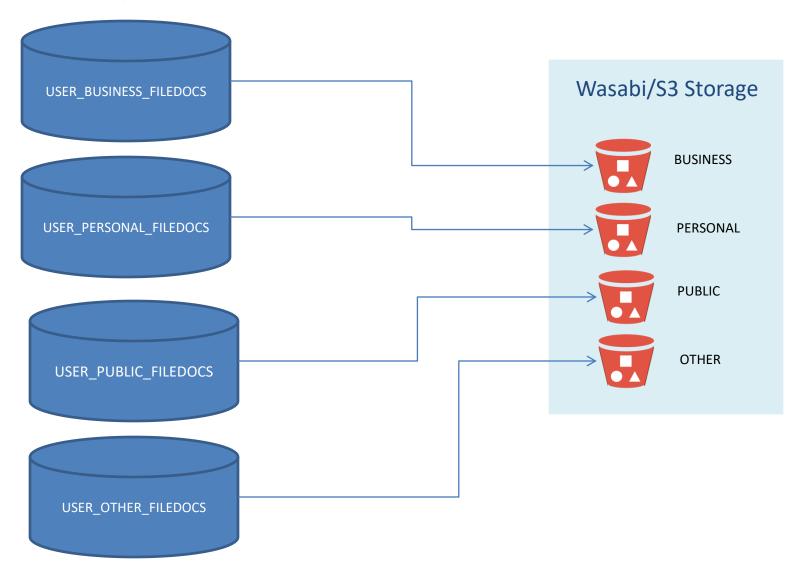
TABLE MAPPING

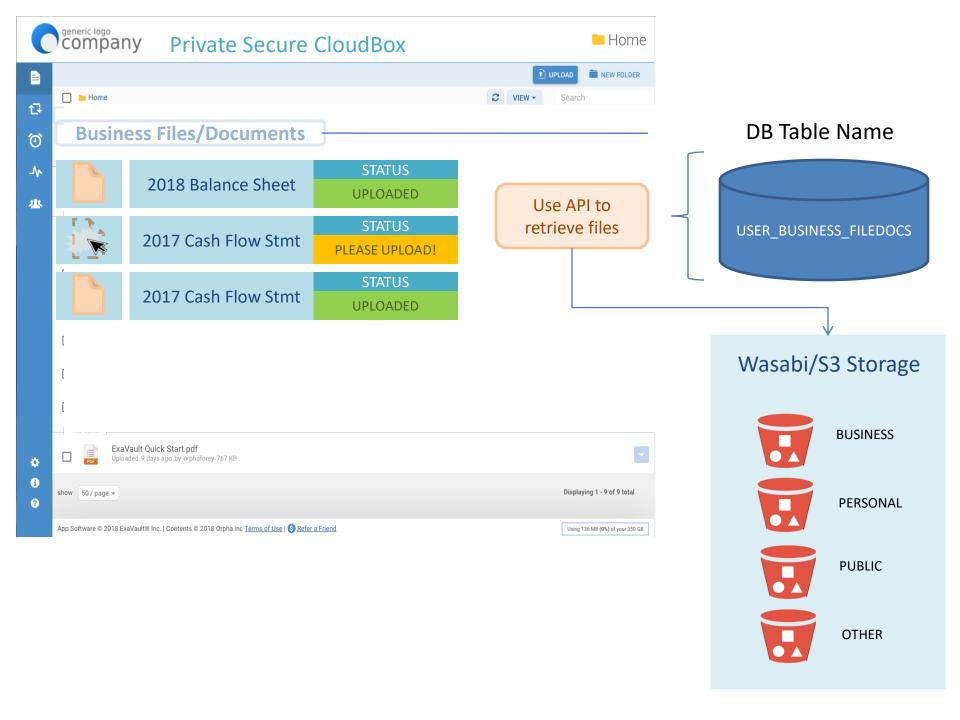




USER DOCS MAP TO WASABI/S3 BUCKETS AND OBJECTS

USER FILEDOC DB TABLES





Cloud Storage Bucket/Object to DB Table Mapping

- Use Standard <u>S3 Bucket/Object naming</u> to create and access User Documents
 - Naming Convention
 - Bucket → UserID → Object-Filename
 - Example "business/400345-Year1_PL_Statement"

	DB TABLE NAME: USER_BUSINESS_FILEDOCS						
FileDoc_ID	UserID	BucketName	ObjectName	DateUploaded	Туре	Version	
8001	400345	business	Year1_PL_Statement	07-19-2019	Basic	1	
8002	400332	business	Year1_PL_Statement	07-11-2019	Basic	1	
8003	400377	personal	Year1_Taxes	07-03-2019	Detailed	2	
8004	400345	business	Year1_CF_Statement	07-19-2019	Detailed	1	

CloudBox BACKEND SCRIPT DETAILS

CloudBox User Roles



STANDARD USER

Upon on-board Standard Set of Folders are created for each Standard User. These folders CANNOT be deleted or changed by Standard User (only Admin). All Private Files are encrypted (on upload, transfer and at rest). All Private Files can only be created, deleted and access/viewed by Standard User unless Standard User grants access .

Standard User Actions

- Uploads files/Documents to CloudBox
- Creates "custom" Folders
- Set Access Levels and Permissions
- Grants Access and Sets Access Expiration

CloudBox User Roles



PARTNER (SERVICE PROVIDER) USER

Service Provider Users are granted access to Basic Files/Documents and Request Access to Special/Private Files/Documents.

PARTNER (Service Provider) User Actions

- Granted Access to "Basic Files" (when Standard User submits Service Request)
- Can Request Access to "Detailed/Other" Files and Documents
- Receives Access Level (View Only, Download) from each Standard User
- Files and Document Access and Access Levels Expire

CloudBox User Roles



ADMIN USER

Admin Users can manage Standard User's Folders – but cannot access or view Standard User files WITHOUT permission granted from the Standard User. They Also CANNOT set Access or Permission Levels – as these are only set by Standard Users when access requests are made.

Admin User Actions

- View Access Levels
- View Service Provider Access Permissions
- View Access Granted
- View Access Expiration
- View Access Activities (Standard and Service Provider User)

PROJECT MILESTONES

Milestone 1

- Integrate and Customize File Manager Script
 - Integrate/Add File Manager module to existing Dashboard Template Layout (AdminLTE – www.adminIte.io)
 - Customize File Manager UI per Project Specification Document
 - Create and perform Unit Test and generate QA/Test
 Report

PROJECT MILESTONES

Milestone 2

- Implement Access Control functionality per User Roles
 - Create User Roles and Access Permissions DB Tables
 - Create Folder, File/Document DB Mapping Table (for S3 Bucket/Object linking)
 - Code/Develop Access Control module (php)
 - Integrate Access Control code w/ Dashboard UI for each User type (Standard User, Service Provider User, Admin User)
 - Create and perform Module, Dashboard/UI QA Test and generate QA/Test Report

PROJECT MILESTONES

Milestone 3

- Implement Cloud Storage (Wasabi/S3) via API backend functionality
 - Setup/Configure EC2 configuration for Wasabi/S3 access
 - Create Wasabi/S3 sample Bucket/Objects (Client provides login credentials)
 - Setup/Configure API support (via PHP SDK)
 - Develop/Implement File/Document CRUD functionality via Wasabi/S3 API calls
 - Development/Implement File/Document Backup from Wasabi to AWS S3
 - Integrate/Replace File Manager "server side" file system functionality with Wasabi/S3 Folder, File/Document functionality via API calls
 - Create test cases for each User Type, perform Unit QA/Test and generate QA/Test Reports