Installation Guide

Product: TAB FusionRMS, All Editions
Release Date: June 10, 2024
Release Version 11.2.3.0

Version History

11.2.3.0 – June 10, 2024

11.2.2.0 – April 18, 2024

11.2.1.0 – March 21, 2024

11.1.2.0 – February 08, 2024

11.1.1.0 – December 21, 2023

11.0.3143 Service Pack 2 Patch04 – October 20,2023

11.0.3143 Service Pack 2 Patch03- September 19, 2023

11.0.3143 Service Pack 2 Patch01&Patch02- August 16, 2023

11.0.3143 Service Pack 2 - May 19, 2023

11.0.3142 Service Pack 1 - January 17, 2023

11.0.3126 - August 19, 2022

Contents

1. Before You Begin

FusionRMS

- Microsoft® Access databases are no longer supported.

- Install Microsoft® SQL Server before installing FusionRMS.

- Install Microsoft® SQL Server Management Studio (SSMS). Depending on the version of Microsoft® SQL Server, SSMS may require a separate installation step.

- Microsoft® SQL Server software and licensing is **NOT INCLUDED** and must be purchased separately.

- Microsoft® SQL Server Express Edition software and licensing is **NOT INCLUDED** but can currently be downloaded from Microsoft® at no charge. The FusionRMS Global/Full Text search feature requires the Advanced Edition of SQL Express with the Fulltext catalog capabilities of Microsoft® SQL Server®.

- The Microsoft® SQL Server® database used by FusionRMS must be set to collation SQL_LATIN1_GENRAL_CP1_CI_AS.

- Ensure the server and workstations have the supported versions of Microsoft® .NET Framework installed.

- Review the minimum system requirements to ensure support compatibility.

FusionRMS WebAccess

- WebAccess black and white label printing requires Microsoft Print to PDF or Win2PDF or Win2PDF TSE. Win2PDF or Win2PDF TSE are third party printer drivers for creating PDF files not included with FusionRMS and must be purchased separately, if desired.

- Ensure that Microsoft® Information Server® (IIS) that will host TAB WebAccess and Microsoft SQL Server® that will host the database are set to the same time zone.

- Ensure that FusionRMS Service Manager is installed on the same server hosting FusionRMS WebAccess.

- Microsoft IIS server should be configured and running before FusionRMS WebAccess is installed. The following features and roles must be turned on. Any feature not listed can be turned on or off. Text in *italics* is for additional explanation and does not show on the feature and roles screen.
    - World Wide Web Services
        - Common HTTP Features
            - Default Document
            - HTTP Errors
            - Static Content
        - Application Development Features
            - .NET Extensibility
            - ASP.Net 4.6.2 *(or above)*
    - Application Server
        - .Net Framework 4.6.2 (*or above*)
        - ASP.Net 4.6.2 *(or above)*
        - WCF Services
            - HTTP Activation
            - TCP Activation
        - Authentication
            - Basic Authentication

- Window Authentication *(Optional for SSO)*

Upgrade Information

If you are upgrading from a previous version, please review the following information:

- FusionRMS 11.0 will upgrade systems from 9.2 and above.
  - Prior to upgrade/uninstall activities, please review and make note of the following settings and configurations:
    - SLIM Manager
      - Customer Serial Number
      - License Details
      - Database Connections
      - Active Directory and SSO Configuration(s)
    - IIS
      - Website Bindings
      - Certificates
      - Application Pools
    - Services
      - Service Manager
      - SLIM Service
      - Image Service

  - The current version of the application must be uninstalled (both server and end user components) prior to installation of the FusionRMS 11.0 version. Once uninstalled, install the FusionRMS 11.0 version to the same path(es) to maintain application configuration settings such as:
    - License details
    - Database connectivity
    - Active Directory & SSO configurations
    - IIS site bindings

  - When upgrading from a previous version of FusionRMS, the data model of the FusionRMS database must be upgraded to align with the application version. To upgrade each database, log into the desired database using the FusionRMS Desktop client. On successful login to the database, a message prompt about updating your database to the current version will be presented. Follow the prompts to complete the automatic update. Note that this automatic update will only modify the model and schema of system tables/objects. No automatic changes are applied to configured tables.

  - Once the installation has been started, a delay may occur prior to the progress bar appearing. To achieve a successful installation, you must continue with the installation once it has begun.

Note that certain application configurations may behave differently between the FusionRMS desktop and web clients. Additionally, certain features are client specific. As such, completion of User Acceptance Testing (UAT) of the upgraded, configured solution in a test environment is highly recommended during an upgrade implementation.

Components

FusionRMS is comprised of several distinct software components. For scalability, each of the components can be installed on physically or virtually separate servers but can also be installed on a single server or desktop computer for a small deployment. Each of the components can be installed through the installer:

- License Server (SLIM Server):
  This is a required component on a network server. It is used to connect a database in the SLIM Manager or Database Utility with the Microsoft SQL Server®. It also handles the synchronization of the Active Directory groups. It should only be installed in one location.

- Service Manager:
  Processes retention-related operations and the background processing tasks initiated by users from WebAccess. It can only be installed in one location. It must be installed on the same server as WebAccess,if WebAccess is deployed.

- License Manager (SLIM Manager):
  The SLIM Manager provides the FusionRMS administrator an interface to add or modify databases, licenses, and seat counts. It can be installed anywhere the administrator needs it, but it should only be installed in one location.

- Web Image Server:
  Manages attachments and documents within IIS for use of Internet Explorer with FusionRMS. This component can also be configured to support desktop clients, replacing the functionality and need for the Desktop Image Service. If you will be using this component, you may select this service instead of the Desktop Image Service. For imaging customers only.

- Image Server Web Service:
  Manages attachments and documents within IIS for FusionRMS WebAccess. If you will be using FusionRMS WebAccess Attachment Viewer, select this service instead of the Image Service. For imagingcustomers only.

- FusionRMS Desktop Client:
  The complete desktop client application, including user interface and the Admin Manager.

- FusionRMS Web Client:
  The web user interface, including the Admin Manager.

- Past Due Email Utility:
  A utility for sending out past due e-mail notifications.

- FusionRMS OCR Utility:

This component is installed separately and is not included within the FusionRMS Desktop or WebAccess Installations. The installation file for this utility is found in FusionRMS Installation Media\Options\Full Text OCR.

FusionRMS Architecture
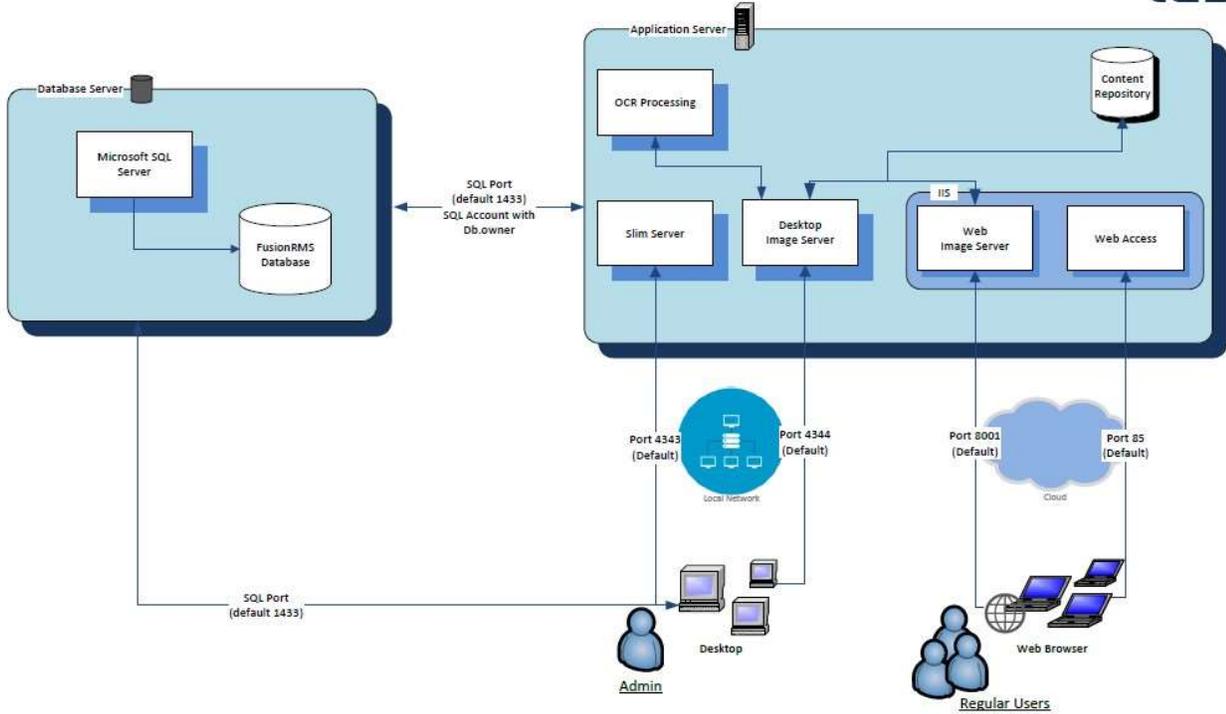
2. Software Installation

FusionRMS Desktop

1. Ensure that the installation media for Desktop application has been unzipped and open the folder.

2. Launch the Setup file. Note that it is best practice to run this file as an administrator (Right-click 'Setup.exe' and choose '**Run as Administrator**').

3. The Welcome screen appears. Accept the license agreement by clicking **Agree**.

4. License Server Location. If this is a workstation (desktop client install) and you know where the license server has been installed, enter the IP address and port number (note that 4343 is the default). If you do not know the location of SLIM, you can search the network (Note: This may take several minutes.). Alternatively, if this is a server, move forward with the default settings.

5. Select your installation type:

   • **Workstation**:

   This is for the general end user. Does not include server components or sample databases.

   • **Server**:

   This is for a network server. It will include the License Manager, Service Manager, Image Server Web Service, and License Server. The License Manager (SLIM Manager) does not need to be installed on the server. It can be installed on the FusionRMS administrator's computer for easier access.

   • **Server Workstatio**n:

   If desired, all the server and workstation components may be installed on one computer that acts asthe server. Users would need access to this computer to open a database.

   • **Custom**:

   All components, except the Image Server Web Service and Database Utility.

   • **Sales Demo**:

   All components, except the Image Server Web Service.

   Note Selecting an installation type will pre-select the list of components that are needed for that type of installation.

6. Review and revise the list of pre-selected components selected for install. In most cases the selectionsmade within the list will not need to be changed.

7. Select a new destination folder for the selected components or click **Next** to accept the default location.

8. If installing the License Server, find and select your license file. If you do not have your license file, you can skip this step, accessing and loading your license details by entering your customer serial number in the SLIM Manager after the installation is completed. Click **Next** to continue.

9. For the services you will be installing, enter valid ports for each one. The default values are already present. Make note of these ports for future reference during installations. Click **Next** to continue.

10. Click **Install**.

FusionRMS WebAccess

1. Ensure that **FusionRMS Service Manager** is installed on the same server hosting FusionRMS WebAccess.

2. Ensure that the installation media for Web Access has been unzipped and open the folder.

3. Navigate into the WebAccess folder and execute the Setup file. Note that it is best practice to run thisfile as an administrator (Right-click 'Setup.exe' and choose '**Run as Administrator**').

4. Click Next to begin.

5. Read and agree to the Software License Agreement.

6. The installation will attempt to locate the SLIM Server service running on the network. A warning may be presented if the SLIM service is not found.

7. For most installations, it is recommended that port 85 be used so as not to interfere with any previous websites established on the IIS default port. It is also recommended that you do not enter ahost header. The ability to edit both the port and host header is provided for advanced IIS users only.Note that the site bindings, security, and port settings may be modified after installation through IIS.

8. Click Next to install to the default destination folder.

9. Click **Install**.

Known Issue: ASP .NET web service extension may not be enabled by default. During the installation, the service will be enabled automatically. If troubleshooting, check to confirm that the service has been enabled.

To enable ASP .NET Web Service Extension

1. Open the Internet Information Services (IIS) Manager.

2. Under the name of the server, click the Web Service Extensions folder.

3. Select ASP .NET, and then click Allow.

Upgrade to FusionRMS 11.2.3.0 From Older Versions

To ensure a smooth transition, customers using FusionRMS 10.2 or older should follow these steps to reinstall both Desktop and Web Access. In contrast, customers currently using FusionRMS 11.0 or above can streamline the system upgrade by uninstalling and subsequently re-installing Web Access only.

Steps:

1. To safeguard any custom information stored in the web.config and local.config files during the installation of Web Access, Copy these files from the Web Access installation path to a temporary location.

2. Before proceeding with the Web Access uninstallation, please export or make a note of all the bindings on the TabWebAccess site in the IIS server, as these might be lost in the upcoming step.

3. Begin the procedure by uninstalling Web Access through the Add or Remove Programs feature in Windows. Please note that you may need to restart the system at this point. If prompted, kindly proceed with restarting the system.

4. Skip these steps for Desktop re-installation if you are using FusionRMS version 11.0 or above.

    1. Proceed to uninstall FusionRMS Desktop through the Add or Remove Programs feature in Windows. If prompted, please proceed with restarting the system.

    2. Install the latest FusionRMS Desktop application, version 11.0.3143, as specified in the previous

section.

5.   Install Web Access 11.1.1.0, following the instructions provided in the previous section. It's important to note that a system restart may be necessary during this installation process. If prompted, please restart the system.

6.   Reinstate the bindings on the web server using the data saved in step 2.

Reinstate the web.config and local.config files, which were copied to the temporary location in step 1, back into the Web Access installation path.

Enabling TLS 1.2 support

To enable TLS 1.2 support, and by extension disabling older TLS 1.0 and 1.1 protocols, first install and configure Microsoft® SQL Server as appropriate and then follow the steps below for FusionRMS specific configurations.

Note For SQL Server 2016 or higher, TLS 1.2 is supported without additional downloads required.

For Microsoft SQL Server®:
- Go to SQL Server Network configuration -> Right-click on your SQL Server instance -> Properties ->Certificate tab
- Choose the certificate which is Assigned or SSL certificate from the Drop down -> Click on Apply
- Click on the Flags -> Click on Force Encryption -> Click on Yes from the Drop down
- Restart Microsoft SQL Server® Service
- Restart FusionRMS Slim Service

For all computers with **FusionRMS Desktop** client installed:
- Download and install the Microsoft MSOLEDBSQL provider

  https://docs.microsoft.com/en-us/sql/connect/oledb/download-oledb-driver-for-sql-server?view=sql- server-ver15
- Navigate to the folder where FusionRMS is installed, and open folder named Slim Server (ex. C:\Program
- Files (x86)\TAB\FusionRMS\Slim Server)
- Open the file slimService.exe.config with a text editor (ex. Notepad) and change the entry for DB provider to MSOLEDBSQL
    o   <add key="DBProvider" value="MSOLEDBSQL"/>
- Save the File and restart Slim Service.

For all servers with **FusionRMS WebAccess** installed:
- Download and install from Microsoft MSOLEDBSQL provider

  https://docs.microsoft.com/en-us/sql/connect/oledb/download-oledb-driver-for-sql-server?view=sql- server-ver15
- Navigate to the folder where FusionRMS WebAccess is installed (ex. C:\inetpub\wwwroot\TAB\WebAccess)
- Open the file Web.config with a text editor (ex. Notepad) and change the entry for DB provider to MSOLEDBSQL
    o   <add key="DBProvider" value="MSOLEDBSQL"/>

- Save the File and restart IIS and Image Server.

Note Windows Server OS, when upgraded to Windows Version of 1809 or newer, supports TLS 1.2 by default. Ifused as the IIS server, no change of the Web.config file is required. (https://support.microsoft.com/en-us/topic/october-20-2020-kb4580390-os-build-17763-1554-preview-ac4799c9-838f-8665-a968-0f19b6cb1049)

WebAccess and Desktop Import using Microsoft® Excel .xlsx files

FusionRMS WebAccess requires the Microsoft Access Database Engine 2016 Redistributable to be installed on theWebAccess Server to support importing records in batch mode using Microsoft® Excel® .xlsx files. FusionRMS Desktop requires Microsoft Access Database Engine 2016 Redistributable to be installed on all computers that willbe used to import records in batch mode using Microsoft® Excel® .xlsx files. The redistributable can be downloaded from https://www.microsoft.com/en-us/download/details.aspx?id=54920. Please follow the instructions as provided by Microsoft to install this component.

WebAccess Black and White Label Printing with PDF files

If Win2PDF or Win2PDF TSE are to be utilized for black and white label printing from the web client, following the steps below to configure.

- Install Win2PDF
- Open "Web.config" file found in C:\inetpub\wwwroot\TAB\WebAccess folder and change the following line from:

    <add key="PrinterDriver" value="Microsoft Print to PDF" />

    To

    <add key="PrinterDriver" value="Win2PDF" />

- Ensure the setting for the Extension is set to "pdf"
- Set the correct permissions on temporary directories
    - Press Windows + R (Run), enter "Temp" into the combobox, grant Full Control to (Administrators and IIS_ISUSRS Users) to the folder (Windows -> Temp)
    - Press Windows + R (Run), enter "%Temp%" into the combobox, grant Full Control (Administrators and IIS_IUSRS Users) for this folder (Windows -> Temp -> 2)
- Restart IIS from IIS Manager, Click on the Server on the right we can see the Restart

WebAccess Black and White Label Printing with XPS files

- Confirm Microsoft® XPS printer driver is installed
- Open "Web.config" file found in C:\inetpub\wwwroot\TAB\WebAccess folder and change the following line from:

    <add key="PrinterDriver" value="Microsoft Print to PDF" />

    To

    <add key="PrinterDriver" value=" Microsoft XPS Document Writer " />

- Ensure the setting for the Extension is set to "XPS"
- Set the correct permissions on temporary directories
    - Press Windows + R (Run), enter "Temp" into the combobox, grant Full Control to (Administrators and IIS_ISUSRS Users) to the folder (Windows -> Temp)
    - Press Windows + R (Run), enter "%Temp%" into the combobox, grant Full Control (Administrators and IIS_IUSRS Users) for this folder (Windows -> Temp -> 2)

Restart IIS from IIS Manager. (Click on the Server on the right then select the Restart option).

WebAccess Background Processing Installation

To execute bulk export and/or transfer activities initiated by users through the WebAccess client, the FusionRMS Service Manager must be installed and enabled (Check the Service Control Manager checkbox for each database from the SLIM Manager). Follow the steps outlined below to complete.

1.   On the application/IIS server, ensure the "Service Manager" component is installed.
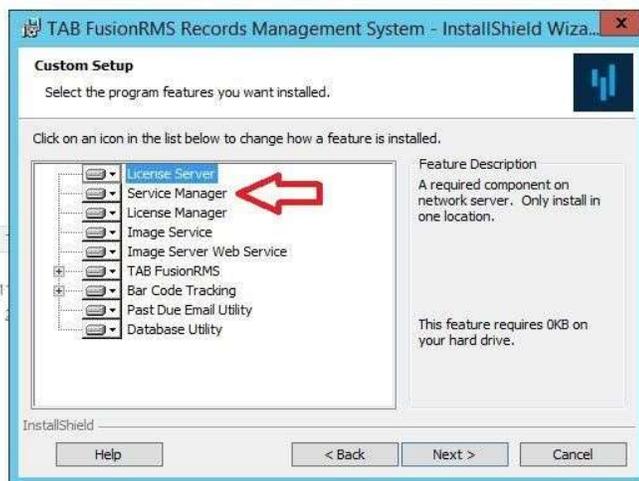
2.   Open the SLIM Manager utility and select the appropriate Database.

3.   Select Actions->Modify Database and, in the window that opens, ensure **'Service Control Manager'** is enabled as shown below. Click OK to save any changes made.
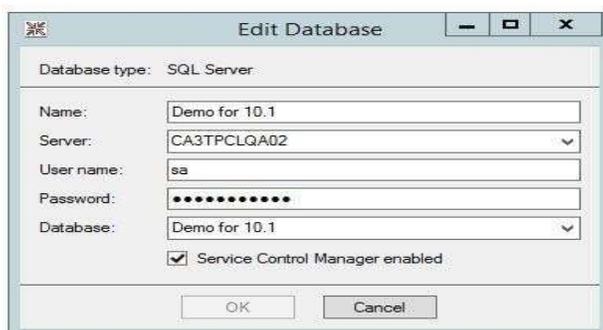
3. License Manager (SLIM Manager)

All databases need to be added to the License Manager (SLIM) before they can be accessed by end users.

1. To open SLIM Manager, on the **Start** menu, select **SLIM Manager** from within the **TAB** folder.

2. View and select options using the SLIM Server Manager tabs:

   a. License

   - View Registration and Dealer information

   - View Products, Seats, Features, and Details available with the current license.

   - To change or add a license, select License in left pane then enter serial number in right pane then from the **Action** menu, choose **Acquire From Internet**.

   - To change or add a license without access to the internet:

     i. On the **Action** menu, click **Load From File**.

     ii. Locate the License Manager File by browsing to the Extras folder within the installation media.

        Note: If you do not have an installation CD and have received the License Manage File bysome other means, copy the file into a network share or local folder, and then browse toit in order to select it.

   - To reset the license to Demonstration mode, on the **Action** menu, click **Reset Demo License**.

   b. Databases

   - To add a database:

     i. On the **Action** menu, click **Add Database**.

     ii. Enter the database and server information. (If you are using SQL Authentication, enter the user name and password for that log in. If you are using Windows Authentication, you must have already signed into the computer running the SLIM Manager as an administrator with rights to the SQL Server; leave the fields blank. See above sections on database connection credentials for more information.)

     iii. Select **Service Control Manager** in order for retention-related reporting, such as the Inactive Records report and Eligible for Destruction report, to be handled as a service.

     iv. Click **OK**.

        Note: Do not add the same database twice.

   - To setup access to the database for FusionRMS and Active Directory

     i. From the column on the left, click the + button, and then select the database.

     ii. Enable Active Directory.

     iii. Enable or disable Service Manager processing for the selected database.

   c. Current User Seats

   FusionRMS utilizes a concurrent user licensing model. If desired, for the desktop client only, namedusers may be reserved a seat so that they may successfully log into the application at any time.

   Please note that this reservation occupies a concurrent seat license at all times, even when the useris not actively logged into the application.

   - View Product, Host, and Time details of logged on users.

- To reserve a seat for a user

    i.   Click **Current User Seats**.

    ii.   On the **Action** menu, click **Manage Seat Reservations**.

    iii.   Select **Manual Add**.

    iv.   Enter a user name.

    v.   Click the arrow on the right and select the product you would like to associate with the reserved seat.

    vi.   Click **Add**.

    vii.   Continue to add reserved seats for users as necessary. Keep in mind that only one seat may be reserved for a user for each installed application. Also, the number of available seats in the pool for each installed application will be reduced by one for each reserved seat added.

3. Close or refresh the License Manager (SLIM) to enable new or modified settings. On the File menu, click **Exit** or **Refresh**.

4. Active Directory Integration

FusionRMS users and groups can be synchronized with the users of Active Directory (AD). This feature helps administrators with tedious tasks, such as adding large numbers of users, updating e-mail addresses, and disablinguser access.

When you perform the integration, you will map Active Directory groups with the groups created in FusionRMS. When synchronization is performed, the mapped groups and all user information is brought over to the FusionRMSsystem. When users log in, they use the same username, password, and domain name that they would use to log in to their computer. FusionRMS will then authenticate this information through Active Directory.

The synchronization may be performed manually or scheduled to run automatically. When Active Directory synchronization occurs, only the FusionRMS data is changed. Active Directory data is never altered, it is only queried. This means that if you need to add a user, first add the user in your Active Directory system and then perform a synchronization with FusionRMS from SLIM Manager. User information should not be added or edited inthe FusionRMS system; it will not be passed back to Active Directory.

Before you integrate with Active Directory you will need to set up your FusionRMS groups and set the permissions.

Integrating Active Directory Groups with FusionRMS

If you enable the Active Directory integration, you must map and synchronize the Administrator group to ensure access to all areas of the system.

To integrate (or map) and synchronize your Active Directory groups with FusionRMS groups:

1. Open the **SLIM Manager**.
2. Click the + button next to Databases.
3. Select your database from the list.
4. Select **Enable**.
5. If found, your Active Directory domain, organizational units, and AD groups will load. If the wrong domain has been found, enter a new one.
6. Select your organizational unit (OU).
7. Select your Active Directory group.
8. Select the corresponding FusionRMS group.
9. Click **Map selected groups.**
10. Continue to map your Active Directory groups and corresponding FusionRMS groups.
11. If you make a mistake, select the item from the synchronization map, and then click **Delete Mapping**.
12. If you would like to create temporary tracking users if one does not exist in the tracking table, select **Create tracking employee**. You can then select whether this should occur for all groups or a selected ADgroup. This is a temporary entry that is created for the session at log in. Note that this feature only pertains to the desktop client.
13. When you are finished, click **Synchronize**.

Active Directory with the FusionRMS WebAccess Module (WebAccess)

To use the Active Directory settings with WebAccess, you will need to make the following Internet Information Services (IIS) setting changes where the database is published.

1. On the **Start** menu, point to **Administrative Tools**, and then click **Internet Information Services**.

2. Under Web Sites, right-click **Default Web Site**, and then click **Properties**.

3. Select the **Directory Security** tab.

4. Under **Authentication and access control**, click **Edit**.

5. If selected, clear **Enable anonymous access**.

(By Default – IIS sets this Access to a newly added website)

Turning on Single Sign On (SSO) for WebAccess

Single Sign On is an optional setting and only available when Active Directory Integration is enabled. Note that SSOis only supported for use with the FusionRMS WebAccess client. Follow the steps below for enabling SSO in Microsoft® Internet Information Services (IIS).

- Ensure the "Window Authentication" feature has been added to IIS

- Ensure Anonymous Authentication is set to Disabled in IIS for the FusionRMS WebAccess site.

- Ensure Windows Authentication is set to Enabled in IIS for the FusionRMS WebAccess site.

- Navigate to and open the SLIM Manager utility.

- From the Databases node, select the desired database. Note that a new database connection can becompleted, if required.

- With Active Directory Synchronization Setup already enabled and the required groups mapped, check theWeb Access SSO Enabled checkbox.

  Note: Disabling Active Directory will automatically disable SSO for the selected database.

To enable or disable login prompts on each client computer:

- Open the Microsoft® Windows® Control Panel and select 'Internet Options'.

- Select the 'Security' tab and add the FusionRMS WebAccess URL to the Trusted zone.

- From Security Options, choose "Custom Level".

- In the Prompt Settings, select "Automatic Logon with current user name and password" under "User Authentication", "Logon".

Scheduling Active Directory Synchronization

If you need to force a synchronization because of important changes to your Active Directory system, you can open

the SLIM Manager, select your database, and then click Synchronize to complete a one-time manual synchronization.

Automated synchronization on an hourly, daily, or weekly bases can be scheduled by using Windows Task Scheduler and the supplied executable SyncToActiveDirectory (exe). Configuring Windows task scheduler is beyond the scope of this document. SyncToActiveDirectory (exe) takes no parameters. It is installed with SLIM server and is typically located in C:\Program Files (x86)\TAB\FusionRMS\Slim Server.

5. Attachment Configurations

Repointing the HTML5Cache

If FusionRMS WebAccess was installed to a different path than the default, review and complete the below steps to ensure that the HTML5Cache configurations are accurate.

- Ensure user IIS_IS has full control permission to the HTML5Cache folder.
- Navigate to the wwwroot folder and open "local.config" file.
    - Modify the value of "lt.Cache.Directory" to reflect the folder location where temporary images are stored. The default setting is:
        - <add key="lt.Cache.Directory" value="C:\inetpub\wwwroot\TAB\WebAccess\HTML5Cache"/>
    - Modify the value of "lt.DocumentConverter.ExePath" to reflect the actual location of the root folder location. The default setting is:
        - <add key="lt.DocumentConverter.ExePath" value="C:\inetpub\wwwroot\TAB\Web Access\leadtoolsutilities\TabFusionRMS.WebDocumentConverter.exe"/>
    - Modify the value of "lt.Ocr.RuntimeDirectory" to reflect the actual location of the root folder location. The default setting is:
        - <add key="lt.Ocr.RuntimeDirectory" value="C:\inetpub\wwwroot\TAB\Web Access\OcrAdvantageRuntime"/>

Maximum permitted file size for Drag and Drop

To change the value (default is 5 MB):

- Navigate to the FusionRMS Administration
- Click on Data section
- Click on Settings Table
- Change the value of DragAndDropAttachment from the Section -> Change the ItemValue to the desired Value in MB

Changing the number of hits displayed in Search Results

Search results are displayed for permitted Views of a Table. The view must be set to Searchable and the user must have access to the View via security configuration. The number of hits displayed for each View is configurable. The default value is 25.

To change the value:

- Navigate to the FusionRMS Administration
- Click on Data section
- Click on Settings Table
- Change the value of GlobalSearch to the desired value

Image Repository

FusionRMS manages and stores attachments (electronic records) within one or many configured repositories. Theservice responsible for managing the image repository will need read/write permissions. When hosting the servicein IIS, the ASP.NET account will need permission. When running as a Windows Service, the system account will need permission.

Image Service File Type Exclusions

Each service has a config file containing a list of file types that are not processed for pages or a preview image. The list is stored in **Tab.RecordsManagement.Imaging.Export.dll.config**.

For the Web Service, the config file is located in **[Install Directory]\ImageServer\Bin**.

For the Windows Service, the config file is located in [Install Directory]\Image Service. In both cases, the list isstored in the

configuration\applicationSettings\Tab.RecordsManagement.Imaging.Export.MySettings\setting[name='Exc lusio ns']\value section as a comma-delimited list. Files of these types can still be used as an attachment and opened in the native application; however, they will not have a preview.

Scanner Utility for Google® Chrome® and Microsoft ® Edge

FusionRMS enables users to scan attachments directly to a record within the WebAccess client via TWAIN based scanners with Google® Chrome® and Microsoft® Edge®. **Note** This feature is not available for Apple® Safari® or Microsoft® IE®.

On first use, the user must download and install the FusionRMS Web Scanning Host utility. The following steps

must be executed on each user's computer.

- Using Google® Chrome® on Microsoft Windows view an attachment.

- Click the Scanner button available on the tool bar

- A pop up will be shown on the screen, click on the link "**Click to Download Service**".
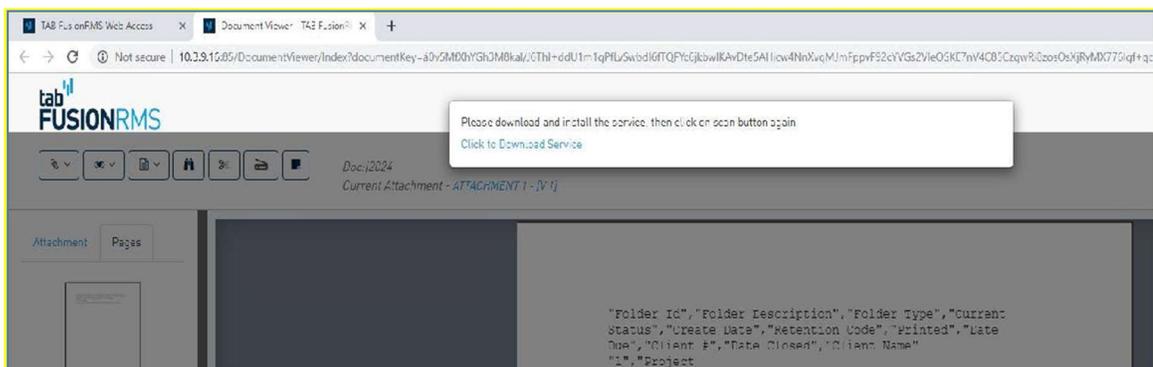
- Double click to install the "msi" file following the on-screen prompts.

- Refresh the attachment viewer page or Click 'F5' from keyboard.

- Ensure a **TWAIN** supported scanner is linked to the local machine via USB or over a network.

- Click Scanner button to initiate and complete scanning process.

6. Silent Installation

Either by using a network logon script or by leveraging Microsoft's SMS capabilities, FusionRMS can be "pushed" out to as many workstations as needed.

The flexibility of the silent installation capability allows any configuration of FusionRMS to be pushed out; from installing FusionRMS Desktop only to installing all components (SLIM Manager, Image Service, etc.). This is accomplished by specifying one or more of the following variable names on the command line.

There is no concept of an install role when installing in silent mode, so you must specify which features you want install.

Variable names that can be set from the command line:

- LICENSE_FILE_NAME   – the path to the license file.
- LICENSE_SERVER_PORT   – the port that will be used by SLIM (eg. 4343).
- SLIM_NETWORK_ADDRESS   – the address of license server on the network, including the port. For example, dbsdlkivwsu101.svrn.acme.com:4343
- IMAGE_SERVER_PORT   – windows image service port.
- IMAGE_WEB_SERVICE_PORT   – web image service port.
- INSTALLDIR   – the directory where files will be installed to.
- ADDLOCAL   – comma separated list of features:
  - viii. License_Server_Files   – License Server
  - ix. Service_Manager_Files   – Background processing service
  - x. License_Manager_Files   – License Server user Interface
  - xi. ImageServiceFiles   – Image Service (windows based service)
  - xii. Image_Server_WebService_Files – Image Service (web based service)
  - xiii. SmeadSoft_RMS_Files   – FusionRMS Desktop
  - xiv. Bar_Code_Files_RMS   – Datalogic Installer files
  - xv. Past_Due_Files   – Server Past Due Email Utility
  - xvi. DatabaseUtility   – Server Database Utility

Note: the EULA is accepted without any interaction when running in silent mode.

Note: silent installation does not remove previous versions of FusionRMS. The previous version must be removed beforehand as part of the SCCM package, login script, etc:

msiexec /x <Product.msi | ProductCode>

Example commands:

To install FusionRMS Desktop only:

> <msiName (including path)> /passive /l*vx c:\tab.log LICENSE_SERVER_PORT="4343" SLIM_NETWORK_ADDRESS="dbsdlkivwsu101.svrn.acme.com:4343" INSTALLDIR="C:\Program Files (x86)\TAB\FusionRMS" ADDLOCAL=SmeadSoft_RMS_Files

To install FusionRMS and the Past Due Email Utility:

```
<msiName    (including    path)>    /passive    INSTALLDIR="C:\Program
Files\TAB\FusionRMS"ADDLOCAL=SmeadSoft_RMS_Files,Past_Due_Files
```

You can also do a silent install from the setup.exe by using InstallShield's passthrough feature:

```
<setup.exe    (including    path)>    /v"/passive    INSTALLDIR=\"C:\\Program
Files\\TAB\\FusionRMS\"ADDLOCAL=SmeadSoft_RMS_Files,Past_Due_Files"
```

7. Program Maintenance

Once you have installed the FusionRMS application and re-run the setup to add or remove extra components, it's important to understand the Custom Setup options. Once past the Welcome screen, select **Modify**. On the **Custom Setup** screen, you can select the components you would like to upgrade and/or install.

- The components listed with the computer image next to them were found on your local machine and will be upgraded.

- The components listed with the red X were not found on your local machine. No action is required.

- If you select one of the components installed locally and switch it to the red X, that component will be removed completely from your local machine.

- If you select one of the components with the red X and switch it to the computer image, it will be installed.

8. Ongoing Operations & Best Practises

Temporary file cleanup

On a regular basis, the contents of the following directories should be deleted from the server hosting FusionRMS WebAccess so as not to fill up the available space. Note that the examples below assume an installation to the default C: drive path.

- C:\inetpub\wwwroot\TAB\WebAccess\HTML5Cache

- C:\inetpub\wwwroot\TAB\WebAccess\ImportFiles

- C:\inetpub\wwwroot\TAB\WebAccess\LabelData

Reboot/ Restart Schedule

TAB recommends the services comprising each of the FusionRMS processes be restarted once a day, the physicalor virtual server hosting the components be rebooted weekly. The FusionRMS services are named:

- SLIM Service

- Service Manager

- Smead Image Service

TAB recommends the services be set to recover by restarting on the first

TAB recommends the services be set to recover by restarting on the first.

9. Troubleshooting

Troubleshooting FusionRMS

Full Text Search: If no results are returned with a search or an error appears, you may need to set the FDHOST Launcher (MSSLFDLauncher) Service Account for full-text search capabilities in the SQL Server Configuration Manager.

Troubleshooting Attachments

No Images in Attachment Viewer:

If you receive a message on the Attachment Viewer that there are no attachments to display, but the header contains the correct title for the attachment, try to re-register ASP.NET for IIS. The command prompt can be slightly different based on your operating system:

(32-bit): C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -i –enable

(64-bit): C:\Windows\Microsoft.NET\Framework64\v4.0.30319\ aspnet_regiis.exe -i –enable

Once you have finished re-registering ASP.NET, reset IIS. You can use the same command prompt and enter: iisreset

500.0 Error:

If you receive a 500 error, uninstall and then reinstall the web service.

10. Database Schema Upgrade Tool

The FusionRMS Database Schema Upgrade Tool is an integral component of the Web Installation package designed to facilitate the upgrading of existing customer database schemas to ensure compatibility with the most recent version of the application. Additionally, the tool offers functionality to instantiate a new database embodying the schema of the Standard Recordkeeping solution provided by FusionRMS. It is important to note that the newly created database will be structured but devoid of any pre-existing data.

Before proceeding with the installation and use of the Database Schema Upgrade Tool, ensure that the Windows Desktop Runtime framework version 7.0.14 or later is installed on the computer. If this requirement is not met, the framework must be installed using the provided executable (windowsdesktop-runtime-7.0.14-win-x64.exe) with administrator rights.

Installation and Operation Instructions:

1. Initial Setup

    - Extract the contents of the application installation bundle.

    - Navigate to the TabFusionRMS.UpdateSchemaTool directory within the extracted contents.

2. Copy the tool to any directory in the Database server.

3. Framework Installation (If required)

    - Execute windowsdesktop-runtime-7.0.14-win-x64.exe with administrator privileges.

    - Follow the on-screen instructions to complete the framework installation.

    - If the Windows Desktop Runtime is already installed, this step may be skipped.

4. Launching the Upgrade Tool

    - Execute SchemaTester.exe to launch the Database Schema Upgrade Tool.

    - If a security warning is presented by Windows Defender, proceed by dismissing the alert.

5. Database Schema Testing and Upgrading

    - Select the "Test Upgrade Schema" option from the tool's main interface.

    - Input the necessary details including the database server name, credentials, and the target database name in the subsequent window.

    - If upgrading without validation, check the "Upgrade Schema without validation" option. This will bypass any existing discrepancies, directly upgrading the schema. Uncheck this option to enforce a validation check before upgrading.

    - Specify the desired location for the report output from the "Report Output" dropdown menu.

    - Initiate the upgrade by clicking on "Test".

    - Upon completion, an HTML report will be generated at the specified location. Review this report for the upgrade status.

    - If the upgrade is conducted without validation, expect a confirmation message along with details of the additions (tables, columns) at the beginning of the HTML report, followed by any schema discrepancies listed towards the end.

    - In cases where validation is enabled and discrepancies are detected, the report will indicate that the upgrade could not be completed. All identified issues must be resolved prior to re-attempting the upgrade.

6. Creating a New Database

- Choose the "Create Database" option if starting with a fresh database schema is desired.

- Enter the relevant details such as the database server name and credentials.

- Click on "Create Database" to initiate the process. The tool will then establish a new database on the server, equipped with the default schema provided by the Standard Recordkeeping solution.

Additional Notes: For databases transitioning from version 10.2 or older to version 11.0, it is recommended to use the schema upgrade tool with validation enabled. This approach helps in identifying and addressing potential schema-related discrepancies, ensuring a smoother upgrade process.

11. Global Search Indexing Tool

This new indexer tool is available as a part of Web Access Installation build and is intended to replace the current desktop application code-based indexer for FusionRMS installations. This tool as of FusionRMS version 11.1.2.0 supports only text indexing, and indexing based on image or document OCR is not supported. To install and run the tool, follow the instructions below:

1. Unzip and open the application installation bundle.

2. Navigate to and open the TabFusion.IndexerTool directory.

3. If running the tool for the first time, perform the following two steps (3.a and 3.b):

   a. If the installed version of FusionRMS is 11.1.2.0 or older, you must run the CreateIndexData.sql script on the SQL server for the intended database. This script is essential for installing the Stored Procedure that the indexer tool needs to function. However, for FusionRMS version 11.2.1.0 or newer, the Stored Procedure is already included in the schema, so manual execution of the script is not necessary.

   b. Install the Windows Desktop runtime framework on the machine where the Indexer tool will run. To do this, open "windowsdesktop-runtime-7.0.14-win-x64.exe" with administrator privileges and proceed with the framework installation. Skip this step if the framework is already installed.

4. To launch the indexer tool, open FusionIndexer.exe with administrator privileges. If a security warning is presented by Windows Defender, proceed by dismissing the alert.

5. In the newly opened window, find two sections: 'Database Login' for entering DB server details and 'Fusion Login' for entering FusionRMS information.

   a. In the 'Database Login' section, provide the SQL Server name or IP, username, and password.

   b. In the 'Fusion Login' section, enter the FusionRMS Database name, FusionRMS username, and password. Clicking the LOGIN button will open a new box for entering Table and Columns.

6. Add all columns from tables that need indexing. The selected items will be displayed in the bottom panel.

Note: If you select a column which is already indexed, then the following step will remove all existing indexed information for that column from the database. Execute this step with caution, as it may result in the loss of existing indexed data.

7. Choose the table-column combinations or use the Check All option to select all and click on Submit. Upon completion of the indexing process, a message will confirm that "The tables were indexed successfully."

12. Database Utility

This is an optional utility for adding databases to a local SQL Server and connecting them with SLIM. If your database is already on SQL Server, you can use the Existing Database feature in Database Utility to connect the database to SLIM.

ADVANCED USERS: This utility can be used to build and attach a database file, restore a database backup file, or execute a SQL script on a local or network server. Use the **Browse** button to locate your file. Enter your server's name\SQL instance. To populate the list with network servers, on the **Tools** menu, click **Options**, and then select **Show Network Servers.** Enter your authentication credentials (see below). Enter a Display Name. (This is the nameyou will see on the Log in screen database list.) You can use the Display Name to name the SQL database, or you can enter a unique database name. Click **Add**. These advanced features are not intended to be a substitute for SQLServer Management Studio.

One-Time Database Connection Credentials

The credentials entered at the time of database connection are what the SLIM Server uses to create or communicate with the FusionRMS database on SQL Server without Active Directory Integration.

With Windows Authentication:

This simple process only requires that the user logged into the computer running the connection process haveadministrative rights to the SQL Server and the Active Directory groups.

- In the **SLIM Manager**, leave the fields blank.
- In the **Database Utility**, select **Windows** under Authentication.

With SQL Authentication:

This process requires that you enter a Login with the correct permissions created within SQL Server.

- In SQL Server, create a Login with SQL Server authentication selected.
- For the default database, select the FusionRMS database you will be connecting. (If you are using the **Database Utility**, leave the default value master.)
- Under **Server Roles,** select **sysadmin**.
- Under **User Mapping**, select the FusionRMS database, and then grant the following memberships: **db_datareader, db_datawriter**, and **db_owner**. (Skip this step if you are using the Database Utility.)

In the **SLIM Manager**, enter the Login. In Database Utility, select SQL and then enter the Login.

Database Connection Credentials

For the initial connection and subsequent Active Directory synchronization, SLIM Server handles the synchronization process of the Active Directory groups and must have access to both the Active Directory system and the database on the SQL Server through either a fixed Windows Authentication or a fixed SQL Authentication Login user.

With Windows Authentication:

This process begins with the initial database connection and continues repeatedly at a set interval or by the administrator to update the Active Directory Integration. (For information on manual and automatic

synchronization, see "Scheduling Active Directory Synchronization" on page 16. A fixed login/user will need to becreated in Active Directory, SQL Server, and then entered as a user for the SLIM Server service.

- Create a user in Active Directory with rights to Active Directory, SQL Server, and the SLIM Server service.
- In SQL Server, create a Login with Windows Authentication for this user.
  - o For the default database, select the FusionRMS database you will be connecting. (If you are usingthe **Database Utility**, leave the default value **master**.)
  - o Under **Server Roles**, select **sysadmin**.
  - o Under **User Mapping**, select the FusionRMS database, and then grant the following memberships:

    db_datareader, db_datawriter, and **db_owner**. (Skip this step if you are using the Database Utility.)

- Add this user to the SLIM Server service. In Services, locate the **SLIM Server**. Right-click the service, andthen click **Properties**. On the **Log On** tab, select **This account**, and then enter the user.

With SQL Authentication:

This process begins with the initial database connection and continues repeatedly at a set interval or by the administrator to update the Active Directory Integration. (For information on manual and automatic

synchronization, see "Scheduling Active Directory Synchronization" on page 16. A fixed login/user will need to becreated in Active Directory, SQL Server, and then entered as a user for the SLIM Server service.

1. Create a user in Active Directory with rights to Active Directory, SQL Server, and the SLIM Server service .
2. In SQL Server, create a Login with SQL Server Authentication that shares the same user name and password that was created for Active Directory.
   - For the default database, select the FusionRMS database you will be connecting. (If you are using the **Database Utility**, leave the default value **master**.)
   - Under **Server Roles**, select **sysadmin**.
   - Under **User Mapping**, select the FusionRMS database, and then grant the following memberships:

     db_datareader, db_datawriter, and **db_owner**. (Skip this step if you are using the Database Utility.)
3. Add this user to the SLIM Server service. In Services, locate the **SLIM Server**. Right-click the service, andthen click **Properties**. On the **Log On** tab, select **This account**, and then enter the user.

13. GUIDE & Application Support

GUIDE - TAB's Help Desk & Customer Care Portal

FusionRMS clients with an active Maintenance Plan can login to GUIDE and manage their own support requests. Logged in users can also search for How To's and Troubleshooting Guides in our extensive knowledge base.

GUIDE provides end users with a complete self-service technical support option and, if you can't find the answer,you can easily open a new support ticket directly from GUIDE.

If you have previously submitted a ticket to 'support@tab.com' you will already have a GUIDE user account but,before you are able to login, you will need to create or reset your password at:

https://tabhelp.zendesk.com/auth/v2/login/password_reset

You can login to GUIDE by navigating to https://tabhelp.zendesk.com and choosing the 'Sign in' link in the upper right corner of the page.