

Advanced Web Scanner Service

The existing Web Scanner mechanism was not supported by all the browsers and required changes in the methodology. The Advanced Web Scanner Service provides a more secure and improved process of scanning the images. User can download the Advanced Web Scanner Service on their client machines. And can configure the switch for storing the scanned images on the local system or server (TIFF files will always be stored on the server as they are used for OCR processing). Another switch can be configured for backward compatibility, if you want to use the existing process.

Also, a major enhancement in the Advanced Web Scanner Service is that the service will now support both the protocols HTTP and HTTPS. The service runs on a specific port range defined in the application for HTTP (50001 to 50005) and HTTPS (60001 to 60005). During the installation, the installer will assign a port available for each protocol to run the service. Configuring the HTTPS protocol requires to import a certificate on the client machine. For detailed information, read the complete article.

The scanning mechanism in the Advanced Web Scanner Service is similar as it was before; the only change in the UI is the dropdown list reflecting the installed Scanners instead of the Source button.

Configure the Advanced Web Scanner Switch

1. Go to **Ephesoft >>Application >> WEB-INF**
2. Open the **web.xml** file in your local editor.
3. By default, the switch is ON. In case it is not, Turn-on the Advanced Web Scanner Switch:

```
<init-param>
    <param-name>advancedWebScannerSwitch</param-name>
    <param-value>ON</param-value>
</init-param>
```
4. This will redirect the Web Scanner URL from **/webscanner.html** to the Advanced Web Scanner URL i.e. **/advancedwebscanner.html**.

Note: Turn-off the advancedwebscanner switch from the web.xml file if you want to use the existing scanning mechanism. (Value = OFF)

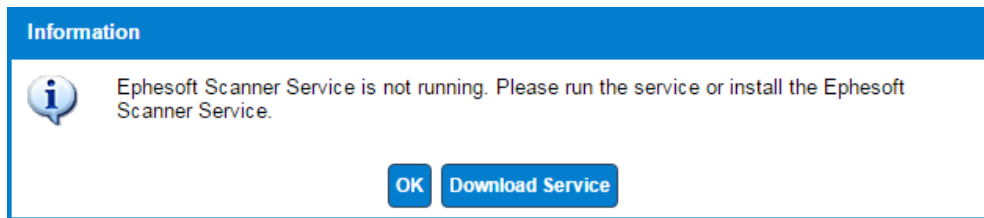
Install the Web Scanner service

If you are running the application on a Client machine and have admin rights, you can install the Web Scanner Service from the application UI itself. In case you do not have the admin rights, you can also go with the manual installation process.

Installing from the Application Interface:

Assumption – You have the admin rights on the Client Machine.

1. Go to the application homepage and click on Web Scanner.
2. If the Advanced Web Scanner switch is ON, the application will check whether the Web Scanner service is installed and running on your local machine.
3. If the service is not installed (running), a popup message appears with an OK and Download Service button.



4. Click on **OK** if the service is not up and **Download Service** if not installed.
5. By clicking on Download Service, it will open a new tab and start downloading the installer.
6. Once the installer is downloaded, run the installer manually to install the service on your local machine.
7. The installation will assign a port for each protocol (HTTP and HTTPS) to the service and make the service up.

Installing from the Ephesoft directory:

Assumption –You have the Ephesoft server installed on your machine and have admin rights.

In this case, you can install the service from the application UI, as well as from the Ephesoft directory.

1. Go to **Ephesoft>> SharedFolders**
2. In this folder, you will find the installer – **EphesoftScannerService.msi**
3. Open command prompt as Administrator and install the service.
msiexec /i EphesoftScannerService.msi

Manual Installation:

Assumption - You do not have the admin rights.

In this case, you have to request the admin user to get the Zip folder containing the executable file. The Zip folder is placed on the Ephesoft server (**Ephesoft>> SharedFolders>>EphesoftScannerService.zip**).

1. Download the Zip folder on your local machine.
2. Unzip and place the folder at the desired place.
Make sure the folder name should remain same i.e. EphesoftScannerService.
3. Click on the **EphesoftScanner_Click_Me.exe** which will setup the service, make the necessary changes on the file and will place the required file on the startup folder so that the service will be auto start on system startup.
4. For manually start of server, click on **EpheSoftScannerServiceStart.bat** file.
5. For stopping the service, click on EphesoftScannerServiceStop.exe.
6. Whenever you want to change the location of the service folder, stop the service and copy the whole folder to the desired location.
7. Click on **EphesoftScanner_Click_Me.exe** and start the service by executing the **EpheSoftScannerServiceStart.bat** file.

Configuring the Advanced Web Scanner over HTTPS

The HTTPS protocol is enabled in the Advanced Scanner Service to avoid **Mixed Content** error. When a user visits a page served over HTTPS, their connection with the web server is encrypted with TLS and is therefore safeguarded from sniffers and man-in-the-middle attacks. If the HTTPS page includes content retrieved through regular, clear text HTTP, then the connection is only partially encrypted; the unencrypted content is accessible to sniffers and can be modified by man-in-the-middle attackers, so the connection is not safeguarded. When a web page exhibits this behavior, it is called a mixed content page. Thus, if Ephesoft server is running over HTTPS and web scanner is used then everything should work without the mixed content error. Also, it is assumed that Ephesoft server is running over HTTPS with valid and verified certificate.

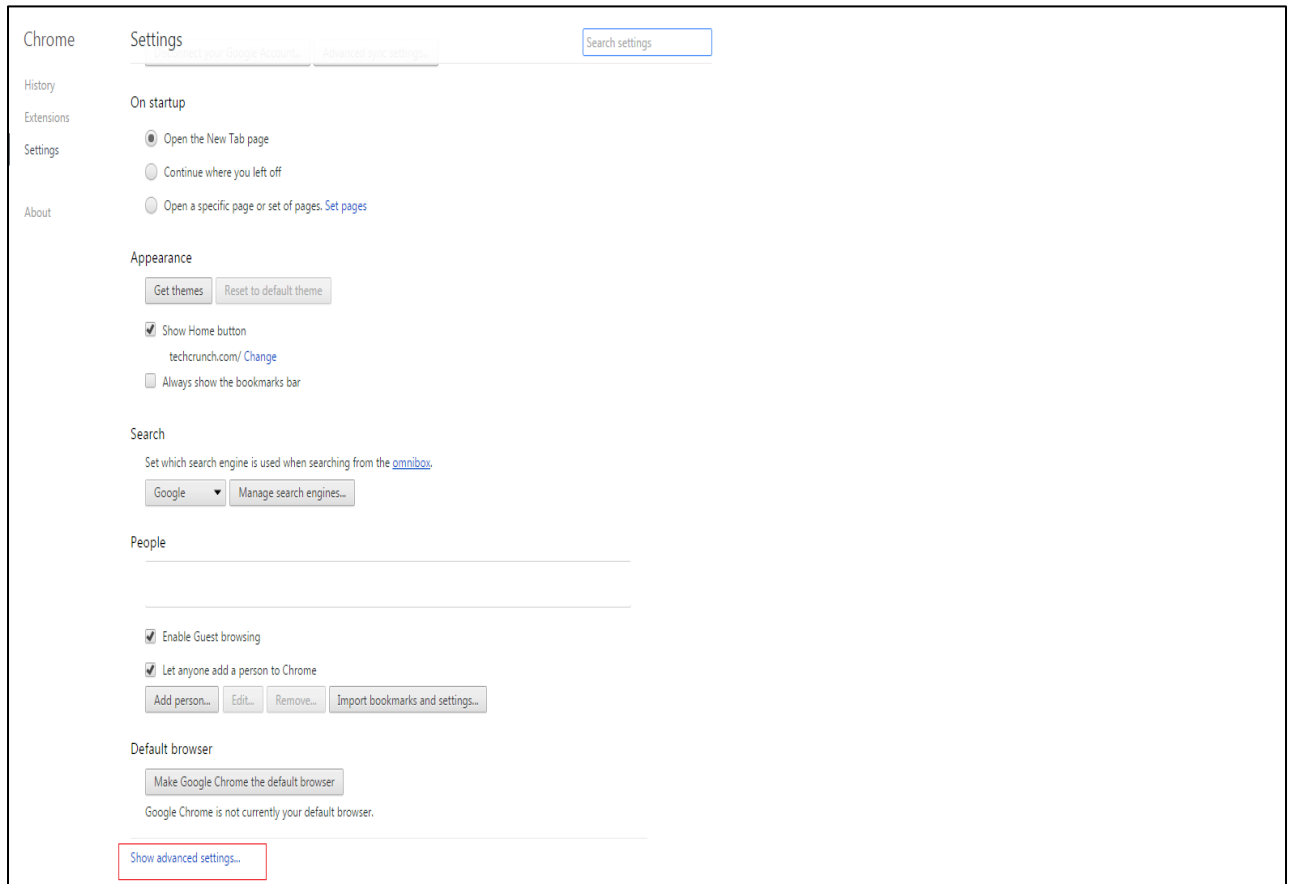
Since, the Advanced Web Scanner Service will always execute over the client's local domain i.e. localhost, no third party will provide a valid signed SSL certificate. This is because: -

- Misconfigured devices actually exist, in the wild, that wait for lookups before resolving localhost from **/etc/hosts**.
- If a router defines **localhost.foo.local**, it may cause localhost to resolve incorrectly (you've probably seen this class of error before).

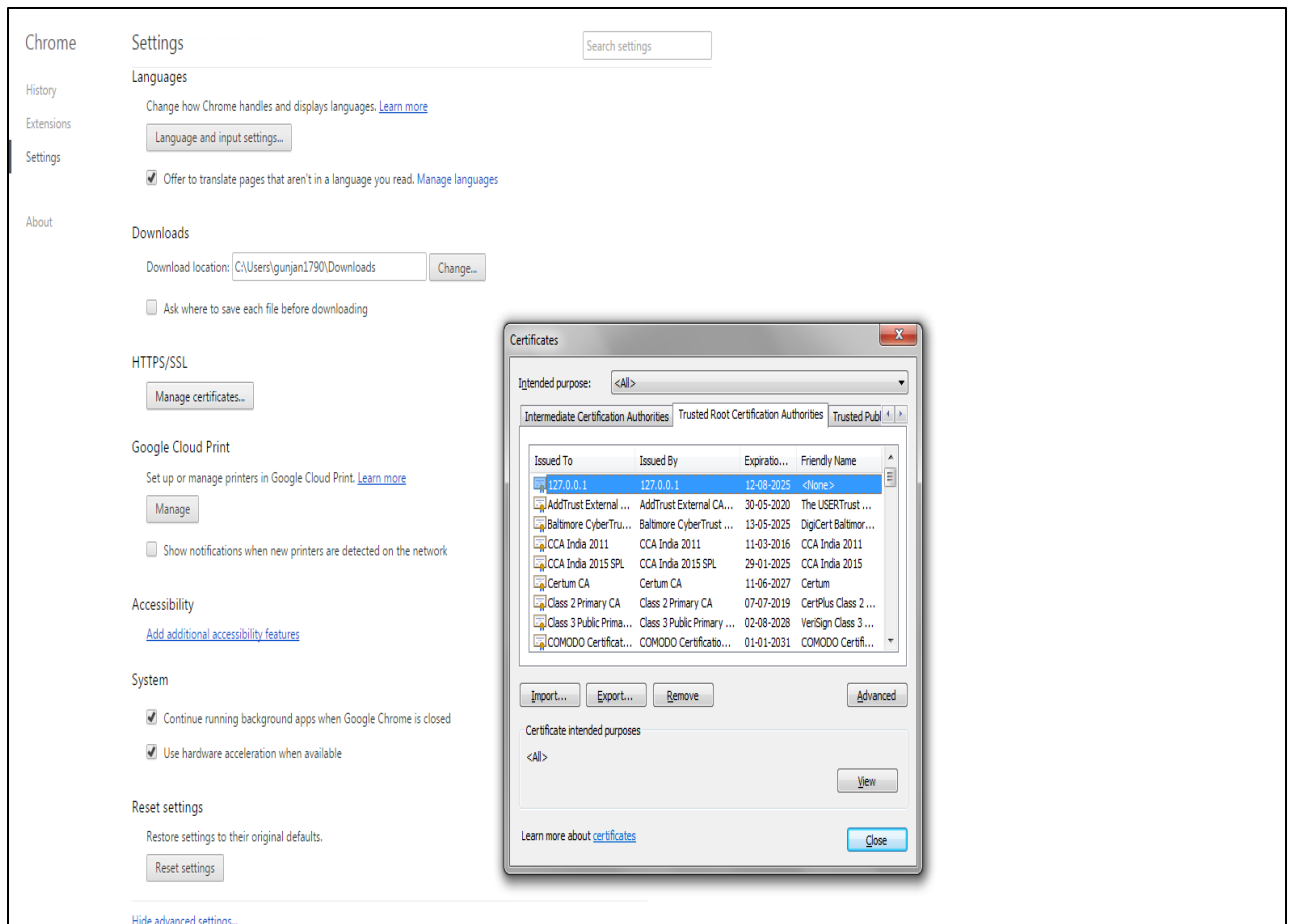
Due to the above reason, Ephesoft has signed its own certificate on which the service would be running. The root certificate of Ephesoft needs to be imported in all the browsers as a trusted CA certificate for everything to work as expected. It is available at ["EphesoftScannerService/Ephesoft-Browser-Cert.crt"](#).

Import the Certificate on Chrome

1. Open the Browser.
2. Go to Settings.
3. Click on Advanced Setting.



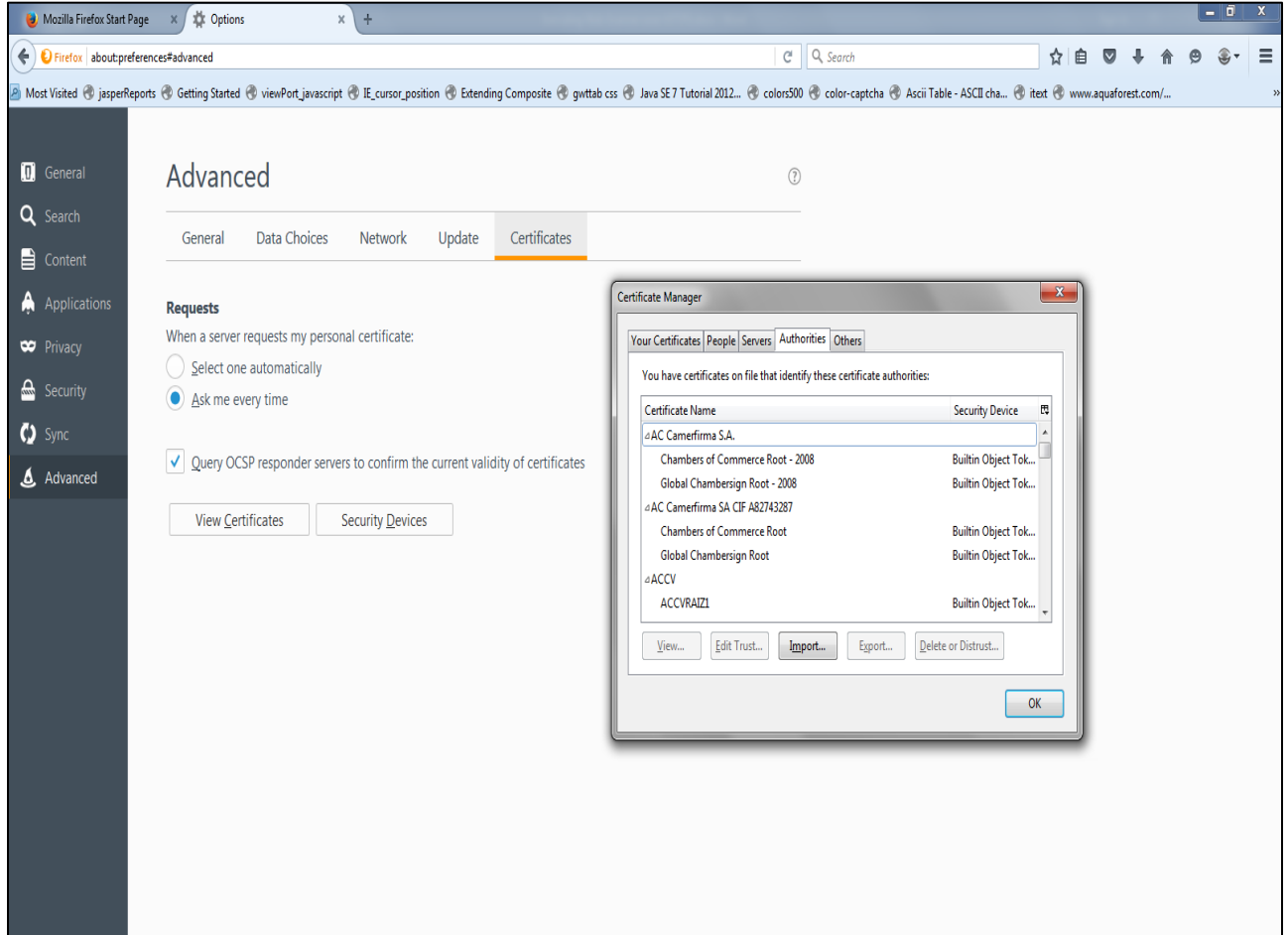
4. Scroll down to section 'HTTPS/SSL'.
5. Click on 'Manage Certificate'.
6. Go to tab 'Trusted Root Certification Authorities'.
7. Click on Import



8. Follow the wizard with all default values.
9. Close the browser and re-open it to use Web Scanner.

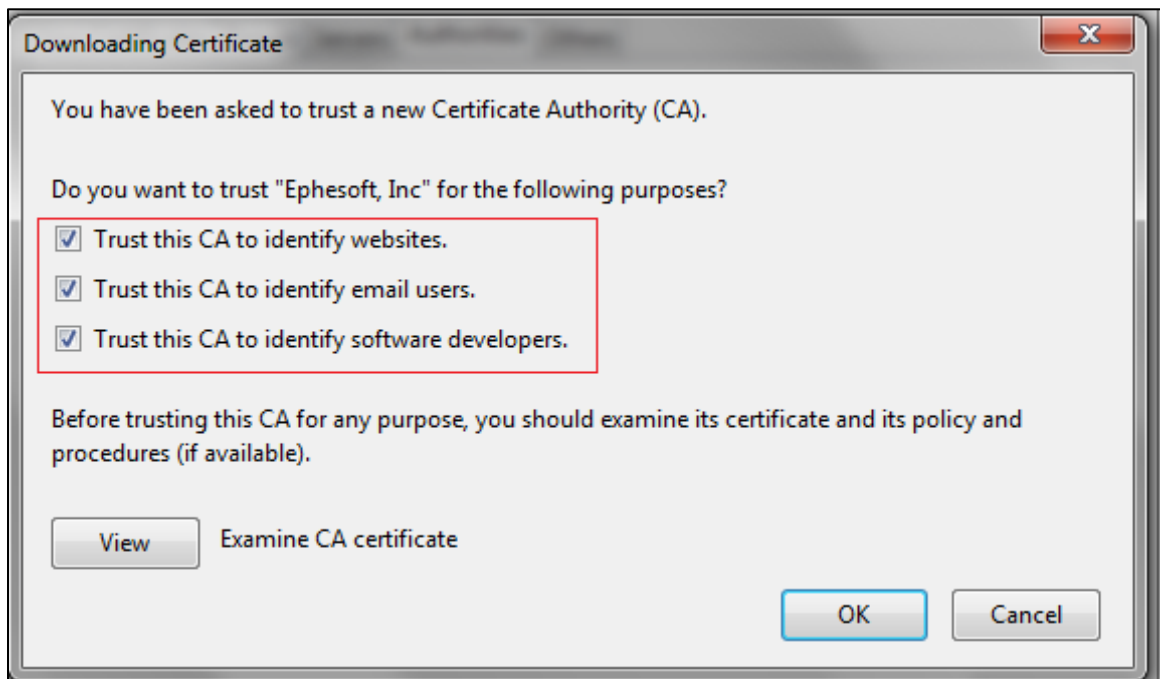
Import the Certificate on Mozilla

1. Open the browser.
2. Go to Options >> Advanced.
3. Click on 'View Certificates'.
4. Go to 'Authorities' tab.
5. Click on Import.



6. Browse to the location of 'Ephesoft-Browser-Cert.crt'.

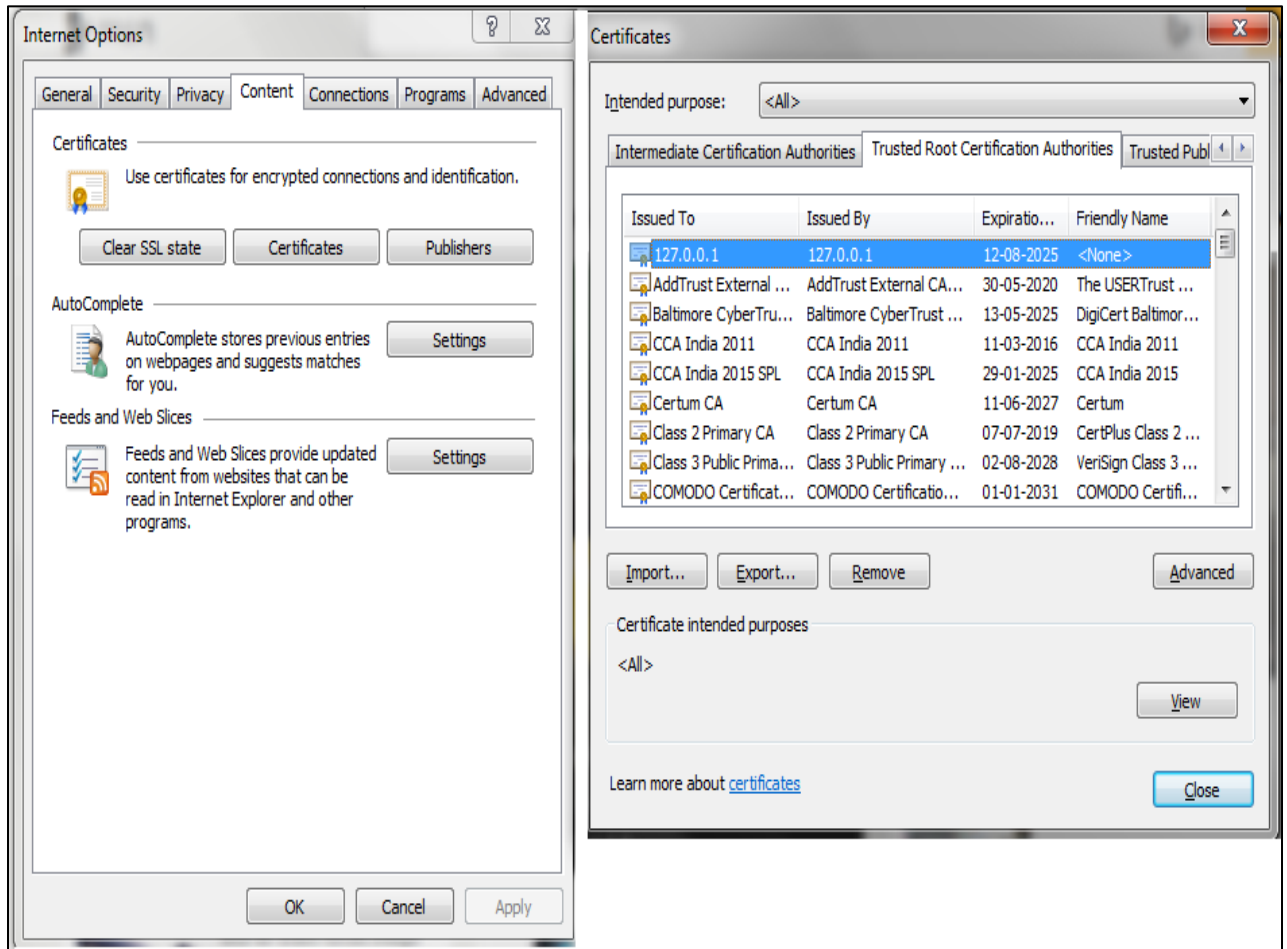
7. Check all the options in the 'Downloading Certificate' pop-up.



8. Click Ok and close all the pop-ups.
9. Close the browser and re-open it to use Web Scanner.

Import the Certificate on Internet Explorer

1. Open the browser.
2. Go to Tools.
3. Go to Internet Options.
4. Go to Content tab.
5. Click on certificates.
6. Go to tab 'Trusted Root Certification Authorities'.



7. Click on Import.
8. Follow the wizard with all default values.
9. Close the browser and re-open it to use Web Scanner.

Local Storage Switch

Every time you start scanning images and each scanned image is stored in three different formats:

- TIFF – for batch processing.
- JPG – for viewing image in large size in the right panel of web scanner UI.
- Thumbnail JPG – for viewing image in thumbnails in the middle panel of web scanner UI.

In the existing web scanning mechanism, all the scanned images were stored at the server.

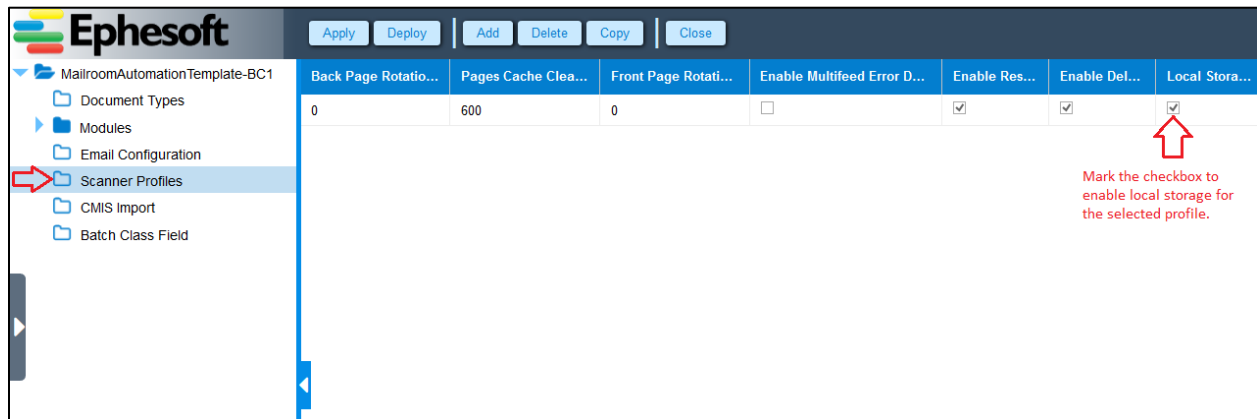
Path: **Ephesoft\SharedFolders\scannedImages\ BatchClassIdentifier_username_timestamp**

For example, **Ephesoft\SharedFolders\scannedImages\ BC1_ephesoft_2016-06-13_03-24-26**

In the Advanced Web Scanner service, the Local Storage switch is ON for each Profile by default. If the switch is ON, all the display images (JPG and Thumbnail JPG) are stored in a temp folder where you have installed the advanced web scanner service.

For example, **C:\Program Files (x86)\EphesoftScannerService\temp\username**

The TIFF files are always stored at server as they are used for batch processing.



Note:

If user started scanning with a Scanner Profile having Local Storage enables, then another operation (insert, rescan, etc.) cannot be performed via another Profile having Local Storage disabled.

If the user is on Review/Validation Screen and performing any operation like rescanning or insert, and navigates to the Web Scanner Screen. The Local Storage switch will be “Off” regardless of the Profile and the scanned files will go on server.

Configure Timeout

If the Local Storage Switch is ON and the system is in idle state for Timeout duration (no scan operation is performed), then the application itself deletes all the images and folder where display images are stored and user will have to restart the scanning process.

You can configure the timeout settings:

- Go to **Ephesoft\Application\WEB-INF\classes\META-INF**
- Open the **application.properties** file in your local editor.
- Change the timeout settings in the property - **webscanner_toolkit_session_timeout**.
By default, it is set to 30 mins.
webscanner_toolkit_session_timeout=30

Configure log level

All the scanner service logs are available in the file '**WebScannerToolKitLogs.log**' located at:

C:\Program Files (x86)\EphesoftScannerService\logs

You can also configure the level of logs (INFO, ERROR, DEBUG) for the scanner service.

To change the log level:

- Go to **C:\Program Files (x86)\EphesoftScannerService**
- Open the file **logback.xml** in your local editor.
- Change the log level from the logger tag.

```
<logger name="com.ephesoft" level="INFO">  
    <appender-ref ref="LOGS" />  
</logger>
```

Error Handling

If any error occurs while performing any scanning operation, the relative error message will pop up.

But in case of Paper stream supported scanner, it is possible that the error message opens at background of the application UI. So, it is recommended to enable the Error Recovery Guide while installing the driver so that the error notification appears on the taskbar.