Perceptive Interact for Microsoft Dynamics AX

Installation and Setup Guide

Version: 2.3.x

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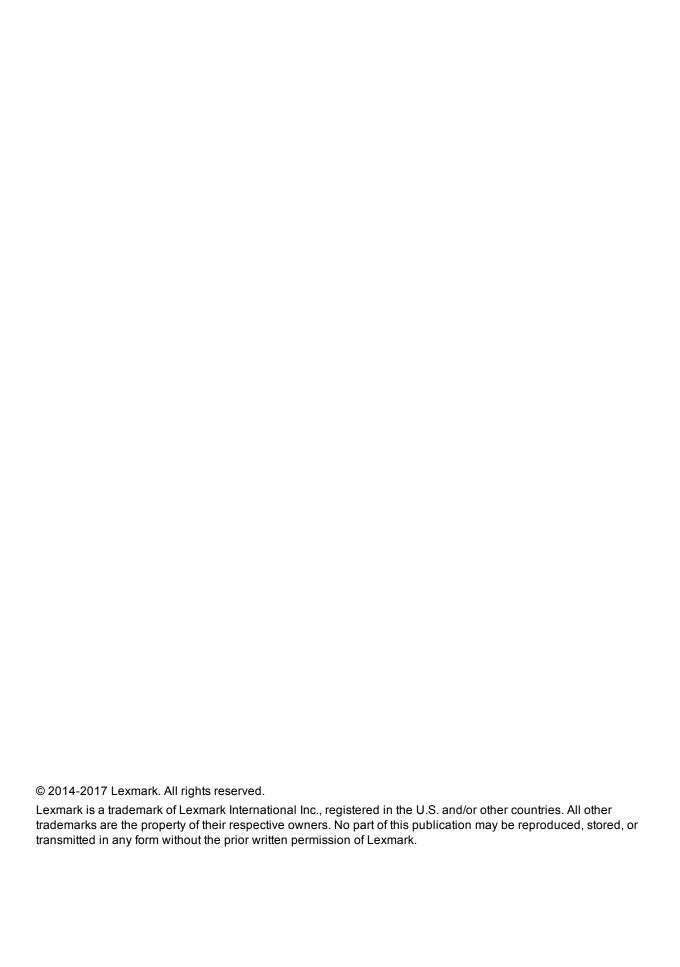
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About Perceptive Interact for Microsoft Dynamics AX

Perceptive Interact for Microsoft Dynamics AX is a content management solution for users of Microsoft Dynamics AX.

This solution enables you to manage documents in Perceptive Content using the Microsoft Dynamics AX user interface. In Microsoft Dynamics AX, you can perform many of the key tasks that you can perform in Perceptive Content, such as adding and viewing documents.

The Microsoft Dynamics AX Help describes only tasks performed using the Microsoft Dynamics AX features. It assumes that the user is familiar with Microsoft Dynamics AX usage.

Required Components

Interact for Microsoft Dynamics AX requires the following software and licensing.

Software

You must have the following software installed on the target computer.

- Microsoft Dynamics AX Server, version 2012 R2 CU6 or R2 CU7, R3, R3 CU8, R3 CU9, R3CU10, R3CU11, and R3CU12

- Microsoft Dynamics AX Client, version 2012 R2 CU6 or R2 CU7, R3, R3 CU8, R3 CU9, R3CU10, R3CU11, and R3CU12

- ImageNow Server, version 6.7 or Perceptive Content Server, version 7.0 or 7.1.5 or 7.2.2

- ImageNow Client, version 6.7 or Perceptive ContentClient, version 7.0 or 7.1.5 or 7.2.2

Note Install Perceptive Content Client on the same computer on which you install Microsoft Dynamics AX Client. For information on installing Perceptive Content Client and Perceptive Content Server, see Perceptive Content Server and Client Installation and Setup Guide for your environment.

- Perceptive Integration Server, version 6.7.0.3667 and higher or 7.0.5.821 and higher or 7.1.0.344 and higher or 7.1.5.1640 and higher or 7.2.2.x

Note For information on installing Perceptive Integration Server, refer to Perceptive Integration Server Installation and Setup Guide.

- Interact Viewer, version 2.2.0

- Browser requirement for the Interact is Internet Explorer (IE) 11

- .NET Framework 4.0 for AX 2012 R2

- .NET Framework 4.5 for AX 2012 R3, R3 CU8 and R3 CU9, R3CU10, R3CU11 and R3CU12

Note Do not install the client version.

You must have the following iscript files ready for use.

- DAX_Doc_VersionControl.js
- DAX_SearchFolderByPath.js

You must have the following installers.

- PerceptiveInteractforMSDynamicsAXSetupServer_2.3.x.xxx.exe
- PerceptiveInteractforMSDynamicsAXSetupClient_2.3.x.xxx.exe

Based on the Microsoft Dynamics AX version you use, you must have one of the following Perceptive Interact for Microsoft Dynamics AX model ready to be imported into Microsoft Dynamics AX.

- PerceptiveInteractR2CU62.3.x.xxx.axmodel
- PerceptiveInteractR2CU72.3.x.xxx.axmodel
- PerceptiveInteractR32.3.x.xxx.axmodel
- PerceptiveInteractR3CU82.3.x.xxx.axmodel
- PerceptiveInteractR3CU92.3.x.xxx.axmodel
- PerceptiveInteractR3CU102.3.x.xxx.axmodel
- PerceptiveInteractR3CU112.3.x.xxx.axmodel
- PerceptiveInteractR3CU122.3.x.xxx.axmodel

Licenses

You must have the following licenses.

- ImageNow Server, version 6.7 or Perceptive Content Server, version 7.0, or 7.1or 7.2
- ImageNow Client, version 6.7 or Perceptive Content Client, version 7.0, or 7.1or 7.2
- Perceptive Interact for Microsoft Dynamics AX, version 2.3

Install Interact viewer

To install the Interact viewer, complete the following steps.

1. Download the required files from the Customer Portal. To obtain the required files, complete the following substeps.
    1. Navigate to the Lexmark Enterprise Software Customer Portal.
    2. In the **Product Downloads** page, search for all downloadable items for Perceptive Interact for Microsoft Dynamics AX, version 2.3.
    3. Download the iScripts, installers and the required model for your environment to a temporary directory on your computer.
2. To copy the files to the relevant folders, complete the following substeps.
    1. To make the iScripts available to Perceptive Content Server, copy and paste the DAX_Doc_ VersionControl.js and DAX_SearchFolderByPath.js files to the *[drive:]\inserver\script directory*.
    2. Copy and paste the PerceptiveInteractforMSDynamicsAXSetupServer_2.3.x.xxx.exe file to the computer that hosts the Application Object Server (AOS).

3. Copy and paste the PerceptiveInteractforMSDynamicsAXSetupClient_2.3.x.xxx.exe file to the computers that host the Microsoft Dynamics AX Client.

3. Restart the Tomcat Server.

Conditions for importing the solution

You must prepare the system as follows before importing the solution.

- Ensure that the Microsoft Dynamics AX Server is running.

- Ensure that the Integration Server is running.

- Set up   so that the appropriate folder types, document types, custom properties, workflow queues, and iScripts are available for use by Perceptive Interact for Microsoft Dynamics AX.

Note For information on configuring Perceptive Content, refer to Perceptive Content Administrator Guide.

Verify that you have the following permissions to work with the model.

- Administrative permissions on the local computer

- Administrator rights in Microsoft Dynamics AX

- In Microsoft SQL Server, membership in the Securityadmin server role on the SQL Server instance and membership in the db_owner role in the Microsoft Dynamics AX database

Install Perceptive Interact for Microsoft Dynamics AX Serve...

Install Perceptive Interact for Microsoft Dynamics AX Server installer

To install the server, complete the following steps.

Prerequisite Before installing the server, close the client connections to the AOS instance that you are working with. If more than one server is using the same database, stop all other AOS instances.

1. Run the PerceptiveInteractforMSDynamicsAXSetupServer_2.3.x.xxx.exe file on the computer that hosts the AOS.

2. In the **Perceptive Interact for Microsoft Dynamics AX Server Installation Wizard** window, complete the following substeps.

1. In the **Welcome to the Perceptive Interact for Microsoft Dynamics AX Server Installation Wizard** page, click **Next**.

2. In the **License Agreement** page, scroll down to the end of the agreement, select the **I accept the terms in the license agreement** check box, and click **Next**.

3. In the **Destination Folder** page, ensure that the default location is set to *C:\Program Files\Microsoft Dynamics AX\60\Server\MicrosoftDynamicsAX\bin*.

4. Optional. To set a different location, click **Change** and in the **Change Current Destination Folder** page, set the correct location, and click **OK**.

5. Click **Next**.

6. In the **Ready to Install the Program** page, to begin the installation, click **Install**.

7. After the installation is complete, in the **Installation Wizard ComplL**page, click **Finish** to exit the Installation Wizard.

Install Perceptive Interact for Microsoft Dynamics AX Client installer

To install the client, complete the following steps.

Prerequisite The client installer must be executed on the AOS server where you are compiling AX after the model import.

1. Run the PerceptiveInteractforMSDynamicsAXSetupClient_2.3.x.xxx.exe file on the computer that hosts Microsoft Dynamics AX Client.

2. In the **Perceptive Interact for Microsoft Dynamics AX Client Installation Wizard** window, complete the following substeps.

    1. In the **Welcome to the Perceptive Interact for Microsoft Dynamics AX Client Installation Wizard** page, click **Next**.

    2. In the **License Agreement** page, scroll down to the end of the agreement, select the **I accept the terms in the license agreement** check box, and then click **Next**.

    3. In the **Destination Folder** page, ensure that the default location is set to *C:\Program Files (x86)\Microsoft Dynamics AX\60\Client\Bin*.

    4. Optional. To set a different location, click **Change and then in the Change Current Destination Folder** page, set the correct location, and click **OK**.

    5. Click **Next**.

    6. In the **Ready to Install the Program** page, to begin the installation, click **Install**.

    7. After the installation is complete, in the I**nstallation Wizard Completed** page, click **Finish** to exit the Installation Wizard.

Import Perceptive Interact for Microsoft Dynamics AX model

To import the model, complete the following steps.

Prerequisite Before importing the model, close the client connections to the AOS instance with which you are working. If more than one server is using the same database, stop all other AOS instances.

1. At the command prompt, right-click and select **Run as administrator**, navigate to the directory for the management utilities. Typically, the location of this directory is *%ProgramFiles%\Microsoft Dynamics AX\60\ManagementUtilities*.

2. At the command prompt, type the import command, and then press **Enter**. The import command syntax is `axutil import /file:<File name>` where `<File name>` is the absolute path of the file.

3. After completion, start the AOS.

4. Open Microsoft Dynamics AX Client.

    A dialog box appears with the message that the new model has been modified and provides options to run the model as required.

5. To upgrade the model, in the **Microsoft Dynamics AX** dialog box, perform one of the following actions.

    - If you are uploading the model for the first time, select **Start the model upgrade checklist**, click **OK**, and proceed with the instructions that follow.

- If you uploaded the same model before, select **Compile and synchronize** and click **OK**.

6. Optional. If you selected the **Compile and synchronize** option, generate Incremental CIL build from X++ after the compilation and database synchronization are complete. To generate Incremental CIL build from X++, complete the following substeps.

   1. In Microsoft Dynamics AX Client, open **New Development Workspace** and right-click **AOT**.
   2. Click **Add-Ins** and then click **Incremental CIL generation from X++**. When the process is complete, proceed with the usual operations.

7. Optional. If you receive a database error, to troubleshoot, complete the following substeps.

   1. Open Microsoft Dynamics AX Client.
   2. In the navigation pane, click **System administration**.
   3. In the **System administration** area page, under **Periodic**, under **Database**, click **SQL administration**.
   4. In the **SQL administration** window, under **All tables**, select INAutoFoldersRecordLog, INDataBaseLogSetup, INEnvironmentProfile, INFolderSetup, INFormGroup, INImageNowFormSetup, INImageNowParameters, INRoleFormAccessSetup, and INTmpCaptureCustomProperties tables.
   5. In the menu bar, click **Table actions** and then click **Synchronize database**.
   6. Click all open windows.
   7. Restart Microsoft Dynamics AX Client.

Troubleshoot to import a model

While importing, if you receive a database error, to troubleshoot, complete the following steps.

1. Open Microsoft Dynamics AX Client.
2. In the navigation pane, click **System administration**.
3. In the **System administration** area page, under **Periodic**, under **Database**, click **SQL administration**.
4. In the **SQL administration** window, under **All tables**, select the following tables.
   - INAutoFoldersRecordLog
   - INDataBaseLogSetup
   - INEnvironmentProfile
   - INFolderSetup
   - INFormGroup
   - INImageNowFormSetup
   - INImageNowParameters
   - INRoleFormAccessSetup
   - INTmpCaptureCustomProperties
5. In the menu bar, click **Table actions** and click **Synchronize database**.
6. Close all open windows.
7. Restart Microsoft Dynamics AX Client.

Set up Active Directory user privileges

Perceptive Interact for Microsoft Dynamics AX supports both administrative and end-user tasks.

To enable a user or all the users of an Active Directory group in Dynamics AX to perform any task, in Microsoft Dynamics AX, under Information technology cycle, assign one or more of the following duties and respective privileges to a Microsoft Dynamics AX role as applicable.

- Maintain Interact setup. This enables the user to perform all administrative tasks in Perceptive Interact for Microsoft Dynamics AX. Assign this duty to the administrator.

- Content maintain. This enables the user to add documents by capturing files and also maintain the content documents.

- View content. This enables the user to view content documents.

Set up an environment

To use , a user must log in to with the user name and password. As an administrator, you must set up an environment for the user to connect to from within . To set up an environment, complete the following steps.

1. In the navigation pane, click **Interact administration > Area page**.
2. In the right pane, under **Setup**, click **Interact parameters**.
3. In the **Interact parameters** window, in the left pane, click **Environments**.
4. Under **Set up environments to log in to Perceptive Content Server**, click **New**.
5. In the **Environment profile** box, type a name for the environment.
6. Optional. In the **Description** box, type a brief description for the environment.
7. Under **Setup**, provide the following credentials.
   1. In the **User name** box, type the user name.

      > **Note** The user must have privilege settings in to browse and create documents.

   2. In the **Password** box, type the password for the user.
   3. In the **Integration Server URL** box, type the Perceptive Integration Server URL.
   4. In the **Light Viewer URL** box, type the Perceptive Light Viewer URL.
   5. In the **WebNow URL** box, type the URL.

      > **Note** Ensure that the format for **Integration Server URL**, **Light Viewer URL**, and **WebNow URL** is *http://<host>:<port number>/<folder name as displayed in the webapps folder in Tomcat server>.*

8. To verify the credentials and test the Server connection, click **Test connection**.
9. Optional. To set this environment profile as a default environment profile during login, in **Interact parameters** window, complete the following substeps.
   1. In the left pane, click **General**.
   2. Under **General,** in the **Default environment profile** list, select the environment profile.

Connect to Perceptive Content Server

To connect to Perceptive Content Server from within Microsoft Dynamics AX, complete the following steps.

1. In the navigation pane, click **Interact administration > Setup > Perceptive Content > Log in to Perceptive Content Server**.
2. Under **Connect to Perceptive Content Server**, under **Credentials**, in the **User name** box, type your user name.
3. In the **Password** box, type your password.
4. Click **OK**.

Configure plug in for viewing Microsoft Office documents

To configure plug in for viewing Microsoft Office documents, complete the following steps.

1. Download **file-image-service** from the Client Portal to a local directory on the server computer, preferably in the Perceptive Content Server location.
2. Download node.js, version 0.12.7 and install the file.
3. Restart the server computer.
4. At the command prompt, select **Run as administrator**, and navigate to the directory where **file-image-service** is installed. At the command prompt, type `node server.js` and press Enter.
5. In integrationserver.ini file, at *$CATALINA_HOME\webapps\integrationserver\WEB-INF*, set the **render.fileimageservice.url** parameter.
6. Restart the Integration Server and Perceptive Content Server from **Windows Services**.

> **Note** You can view Microsoft Office documents in Perceptive Content version 7.1 and above. Ensure that the node.js service is running. If the node.js service stops, you have to execute the command `node server.js` from the command prompt again.

About copying an existing configuration

About copying an existing configuration

You can copy an existing Perceptive Interact for Microsoft Dynamics AX configuration from one system environment to another.

In Microsoft Dynamics AX, to move a configuration to a new environment, you must export and import groups of tables.

> **Note** In the Interact administration area page, you can export and import only the settings under Form groups and Interact parameters. Export or import functionality is not applicable for Form access setup or any other settings.

Export a configuration

In the Interact administration area page of , you can export only the settings available under the Form groups and Interact parameters section. To export an existing configuration, complete the following steps.

1. In the navigation pane, click **Interact administration > Area page**.
2. In the **Area page**, under **Setup**, click **Export Interact Configuration**.
3. In the **Export options** window, on the **General** tab, in the **File name** box, complete one of the following options.

    -   Type a folder path and file name.

    -   To select an existing file path, click .

4. Click **OK**.

Import a configuration

In the Interact administration area page of , you can import only the settings available under the Form groups and Interact parameters section. To import an exported configuration, complete the following steps.

1. In the navigation pane, click **Interact administration > Area page**.
2. In the **Area page**, under **Setup**, click **Import Interact Configuration**.

    A confirmation message box appears before deleting the configuration data.

3. Optional. Maintain a backup of the database.
4. To continue with import and delete configuration data, click **Yes**.
5. In the **Import options** window, on the **General** tab, in the **File name** box, complete one of the following options.

    -   Type a folder path and file name.

    -   To select an existing file path, click .

6. Click **OK**.

    A confirmation message box appears before final execution of the Import process.

7. Click **Yes**.

    1. If a user selects some options in a table and wants to import the configuration, a confirmation message box appears prompting you to approve deletion of the tables. To prevent table deletion, click **Cancel**.

        Example If the user selects some options in the Database Log Setup table and wants to import the configuration, a confirmation message box appears before deleting the tables.

    The **Infolog** window displays information about the Import process.

Troubleshoot Interact for Microsoft Dynamics AX

Troubleshoot Interact for Microsoft Dynamics AX

If a functional issue occurs, use the information in this section to aid with troubleshooting.

- Ensure that the format for Integration Server URL and Interact viewer URL is http://<host>:<port number>/<folder name as available in webapps folder in Tomcat server>.

- Ensure that there is no slash (/) at the end of the Integration Server URL, and Interact viewer URL.

- If you are unable to view the Interact Viewer, copy the Interact Viewer URL and paste the URL in Internet Explorer.

- To add or delete a fact box from Forms section available under the Interact parameters section, ensure that you are an authorized system administrator.

- After you set up automatic folder creation, if automatic folders are not created for a new record, complete the following steps.

1. In the navigation pane, click System administration.
2. In the System administration area page, under Setup, under Database, click Database log setup.
3. In the Database log setup window, click New.
4. In the Logging database changes wizard, in the Logging database changes page, click Next.
5. In the Tables and fields page, select the Show all tables check box.
6. Under System, select the All tables check box and then click Next.
7. In the Types of change page, select the Track new transactions check box.
8. Click Next.
9. Click Finish to exit the wizard.
10. In the Database log setup window, click Delete.
11. In the confirmation message box, click Yes.
12. In the Database log setup window, click Close to exit.

- If you encounter a file already in use type of capture error during document capture based on any AX form, you must restart the Microsoft Dynamics AX Object Server or copy the document file to a different folder location on your computer and try to capture the same.

- If you encounter TextIo object not initialized type of error after providing the user name and password to connect to Perceptive Content Server with Remember me check box selected, you must ensure that *<drive>:\Users\<username>\AppData\Roaming\Microsoft\Credentials* folder exists on your computer and the AX user has write access to that folder.

- If you encounter a remote server 409 conflict error while capturing a document with the document name same as that of an existing document in the same location of Perceptive Content Server but in different letter case, you must change the document name to match the letter case with the existing document, or use a different document name.

- If you encounter popupEventHandler error after removing IDAX model, navigate to AOT, expand the Classes, traverse to Info class, expand the Info class, traverse to startupPost method, and delete the event handler INLoginPopupHandler. You can start an incremental CIL build after this.

- If you encounter a conflict error while importing the IDAX model and a Conflict push is not successful, you must identify the model with the conflict threat. If it is an older version of IDAX model, delete that model using AxUtil command. In case the ISV Model generates a conflict, you must delete that ISV model as well. You must tart AOS, perform full compile and a full CIL generation followed by a Database Synchronization. After stopping AOS reimport the IDAX model and restart AOS.

- If you restart AOS, an invalid session issue may occur while opening the Interact Viewer. You must delete the browsing history and restart Interact viewer.

- If you encounter a SysSetupForm error on opening the AX client, you must execute the entire AX compilation steps to validate that the Interact Client and server installers are properly installed on the AX server where you are executing the compilation process.

- If your AX AOS instance is not the default MicrosoftDynamicsAX name, ensure that the Interact Client and Server assemblies are installed in the proper location.

- If you encounter an "assembly not found reference" error containing the INFolderTreeViewer name on opening the AX client, check whether INConnectorInterface.dll, ISProxy.dll, INController.dll, INFolderTreeViewer.dll are installed in your local computer.

Note The DLL files must be available in the server bin of the AOS and the client bin of all the clients. For client, sample location is *<AX Client install location>\<Instance number>\Client\bin*. Typical default location is *C:\Program Files (x86)\Microsoft Dynamics AX\60\Client\Bin*. For sever, sample location is *<AX Server install location>\<Instance number>\Server\<Instance name>\bin*. The default location is *C:\Program Files\Microsoft Dynamics AX\60\Server\MicrosoftDynamicsAX\bin*.

Troubleshoot to import a model

While importing, if you receive a database error, to troubleshoot, complete the following steps.

1. Open Microsoft Dynamics AX Client.
2. In the navigation pane, click **System administration**.
3. In the **System administration** area page, under **Periodic**, under **Database**, click **SQL administration**.
4. In the **SQL administration** window, under **All tables**, select the following tables.
   - INAutoFoldersRecordLog
   - INDataBaseLogSetup
   - INEnvironmentProfile
   - INFolderSetup
   - INFormGroup
   - INImageNowFormSetup
   - INImageNowParameters
   - INRoleFormAccessSetup
   - INTmpCaptureCustomProperties

5. In the menu bar, click **Table actions** and click **Synchronize database**.
6. Close all open windows.
7. Restart Microsoft Dynamics AX Client.

Troubleshoot to install Interact for Dynamics AX server / client installer with an upgraded version

While executing or installing a Perceptive Interact for Dynamics AX Server or Perceptive Interact for Dynamics AX Client installer with an upgraded version, we recommend cleaning or uninstalling the existing Interact application. You must stop the Application Object Server service and uninstall the Perceptive Interact for Dynamics AX Server installer and Perceptive Interact for Dynamics AX Client installer. To uninstall the installers, complete the following steps.

1. In the **Control Panel > Programs & Features**, delete the existing INController.dll, ISProxy.dll, INConnectorInterface.dll and INFolderTreeViewer.dll files from *<drive>:\Program Files\Microsoft Dynamics AX\60\Server\MicrosoftDynamicsAX\bin folder (in server) and <drive>:\Program Files (x86) \Microsoft Dynamics AX\60\Client\Bin folder (in client)*.
2. Execute the upgraded version of the installers.

Troubleshoot to view a document in the Interact Viewer

For a particular Dynamics AX user, it may happen that while trying to open a document in Interact Viewer, a blank Perceptive documents window appears, in that scenario try to open the Light Viewer URL using Internet Explorer (IE) which is executed as that Active Directory user. If the blank page still appears, you must add the website to the Trusted sites zone for that Dynamic user. To add the website to the Trusted sites zone for that Dynamic user, complete the following steps.

 Prerequisite To add any site to Trusted sites zone, the user must be an authorized system administrator of the system where Dynamics AX client is running.

1. Open Internet Explorer using that Active Directory user credentials.
2. Click **Tools > Internet Options**.
3. Under the **Security** tab, select **Trusted sites** and add the site URL http://<host> to the zone.

Troubleshoot to view a document during SSL communication in Interact Viewer

During SSL communication in which the Integration Server and Light Viewer URL are on https, it may happen that while trying to open a document in Interact Viewer you are unable to view any icons in the page. To troubleshoot, complete the following steps.

1. You must add the website to the Trusted sites zone in Internet Explorer for that Dynamics AX user.
2. Enter the Light Viewer URL in Internet Explorer and install the certificate in the **Trusted Root Certification Authorities** section.
3. In Internet Explorer, open **Internet Options** and click the **Advanced** tab.
4. Under **Advanced**, scroll down to the **Security** section to select **TLS 1.0**, **TLS 1.1** and **TLS 1.2**. Clear the **Do not save encrypted pages to disk** check box.
5. In the Internet Explorer, delete all the browsing history along with cookies and clear the cache.