

Excel Services

Data Refresh Flowchart

Excel Services in Microsoft SharePoint Server 2010

About this diagram

This diagram shows the sequence of events that occurs when Excel Services renders a data-connected Excel workbook. There is no user interaction with the processes shown. The path followed at each decision point is based on settings within the workbook or within Excel Services that were previously configured.

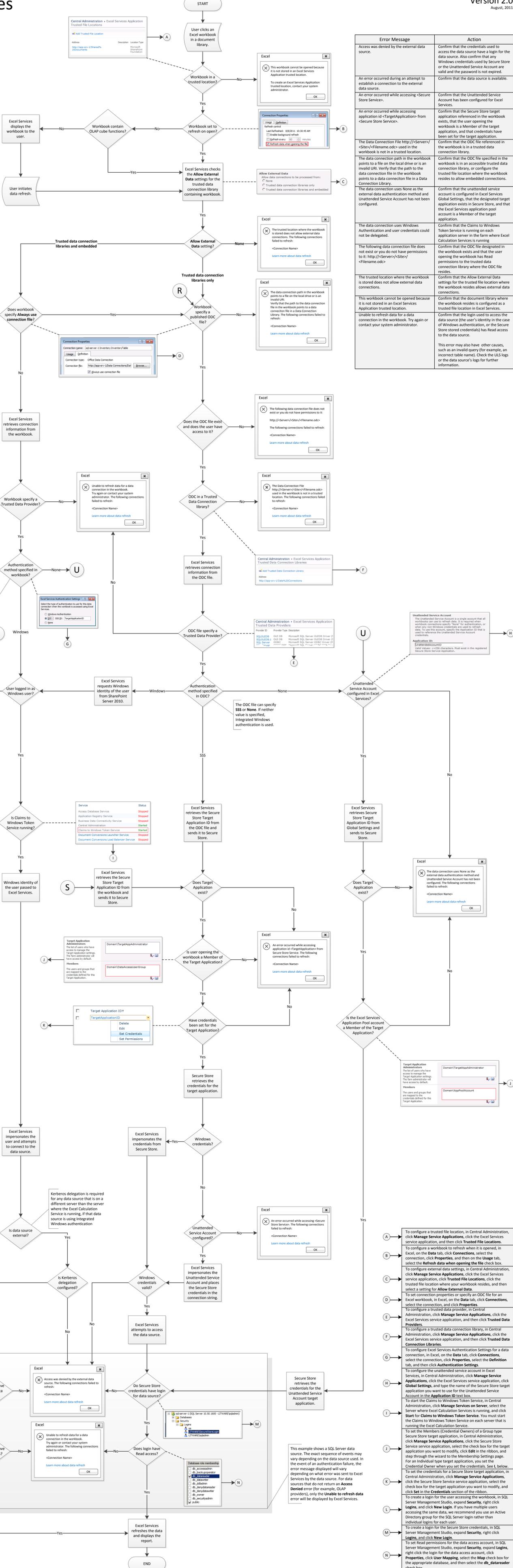
For information about an error, see the error table in the upper right. For information about a particular setting, follow the reference callout associated with the screenshot for that setting.

This diagram can be used to get a better understanding of how Excel Services works or to troubleshoot specific issues.

This diagram applies to Excel Services in SharePoint Server 2010.

Legend

- Start or End
- User input
- Decision point within the backend process
- Backend process performed by services within SharePoint Server 2010
- Reference point connecting the flowchart in two different locations
- Reference point to information on how to configure the setting shown
- Related UI
- Flow Direction



Error Message	Action
Access was denied by the external data source.	Confirm that the credentials used to access the data source have a login for the data source. Also confirm that any Windows credentials used by Secure Store or the Unattended Service Account are valid and the password is not expired.
An error occurred during an attempt to establish a connection to the external data source.	Confirm that the data source is available.
An error occurred while accessing <Secure Store Service>.	Confirm that the Unattended Service Account has been configured for Excel Services.
An error occurred while accessing application ID <TargetApplication> from <Secure Store Service>.	Confirm that the Secure Store target application referenced in the workbook exists, that the user opening the workbook is a Member of the target application, and that credentials have been set for the target application.
The Data Connection File http://<Server>/<Site>/<Filename.ods> used in the workbook is not in a trusted data connection library.	Confirm that the ODC file referenced in the workbook is in a trusted data connection library.
The data connection path in the workbook points to a file on the local drive or is an invalid URI. Verify that the path to the data connection file in the workbook resides in a Data Connection Library.	Confirm that the ODC file specified in the workbook is in an accessible trusted data connection library, or configure the trusted file location where the workbook resides to allow embedded connections.
The data connection uses None as the external data authentication method and Unattended Service Account has not been configured.	Confirm that the unattended service account is configured in Excel Services Global Settings, that the designated target application exists in Secure Store, and that the Excel Services application pool account is a Member of the target application.
The data connection uses Windows Authentication and user credentials could not be delegated.	Confirm that the Claims to Windows Token Service is running on each application server in the farm where Excel Calculation Services is running.
The following data connection file does not exist or you do not have permissions to it: http://<Server>/<Site>/<Filename.ods>	Confirm that the ODC file designated in the workbook exists and that the user opening the workbook has Read permissions to the trusted data connection library where the ODC file resides.
The trusted location where the workbook is stored does not allow external data connections.	Confirm that the Allow External Data settings for the trusted file location where the workbook resides allows external data connections.
This workbook cannot be opened because it is not stored in an Excel Services Application trusted location.	Confirm that the document library where the workbook resides is configured as a trusted file location in Excel Services.
Unable to refresh data for a data connection in the workbook. Try again or contact your system administrator.	Confirm that the login used to access the data source (the user's identity in the case of Windows authentication, or the Secure Store stored credentials) has Read access to the data source.

- A To configure a trusted file location, in Central Administration, click **Manage Service Applications**, click the Excel Services service application, and then click **Trusted File Locations**.
- B To configure a workbook to refresh when it is opened, in Excel, on the **Data** tab, click **Connections**, select the connection, click **Properties**, and then on the **Usage** tab, select the **Refresh data when opening the file** check box.
- C To configure external data settings, in Central Administration, click **Manage Service Applications**, click the Excel Services service application, and then click **Trusted Data Providers**.
- D To set connection properties or specify an ODC file for an Excel workbook, in Excel, on the **Data** tab, click **Connections**, select the connection, click **Properties**, and then click **Trusted Data Connection Libraries**.
- E To configure a trusted data provider, in Central Administration, click **Manage Service Applications**, click the Excel Services service application, and then click **Trusted Data Providers**.
- F To configure a trusted data connection library, in Central Administration, click **Manage Service Applications**, click the Excel Services service application, and then click **Trusted Data Connection Libraries**.
- G To configure Excel Services Authentication Settings for a data connection, in Excel, on the **Data** tab, click **Connections**, select the connection, click **Properties**, select the **Definition** tab, and then click **Authentication Settings**.
- H To configure the unattended service account in Excel Services, in Central Administration, click **Manage Service Applications**, click the Excel Services service application, click **Global Settings**, and type the name of the Secure Store target application you want to use for the Unattended Service Account in the **Application ID** text box.
- I To start the Claims to Windows Token Service, in Central Administration, click **Manage Services on Server**, select the Server where Excel Calculation Services is running, and click **Start for Claims to Windows Token Service**. You must start the Claims to Windows Token Service on each server that is running the Excel Calculation Service.
- J To set the Members (Credential Owners) of a Group type Secure Store target application, in Central Administration, click **Manage Service Applications**, click the Secure Store Service service application, select the check box for the target application you want to modify, click **Edit** in the ribbon, and then follow the wizard to the Membership Settings page. For an individual type target application, you set the Credential Owner when you set the credentials. See I below.
- K To set the credentials for a Secure Store target application, in Central Administration, click **Manage Service Applications**, click the Secure Store Service service application, select the check box for the target application you want to modify, and click **Set** in the **Credentials** section of the ribbon.
- L To create a login for the user accessing the workbook, in SQL Server Management Studio, expand **Security**, right-click **Logins**, and click **New Login**. If you have multiple users accessing the same data, we recommend you use an Active Directory group for the SQL Server login rather than individual logins for each user.
- M To create a login for the Secure Store credentials, in SQL Server Management Studio, expand **Security**, right-click **Logins**, and click **New Login**.
- N To set Read permissions for the data access account, in SQL Server Management Studio, expand **Security**, expand **Logins**, right-click the login for the data access account, click **Properties**, click **User Mapping**, select the **Map** check box for the appropriate database, and then select the **db_datareader** check box.