

## Captaris Sync Module

The Captaris Sync Module Hotfix replaces the existing Active Directory Synchronization service associated with the RightFax WorkServer module. This document outlines its functionality, requirements, and configuration.

### Description the Captaris Sync Module

The Captaris Sync Module is a new XML/XSLT based tool that lets RightFax administrators create and synchronize users from Active Directory domains, groups, and/or organizational units. This service (RFSync.exe) is installed and runs independently on the RightFax server. Configuration of the Sync Module is done via a Windows Control Panel application or from Enterprise Fax Manager where it is listed with the other RightFax services.

### Changes and New Features

1. Synchronization data is no longer stored in Active Directory and therefore schema changes are not required.
2. XML-based transform files replace the previous 'profile' architecture and are stored locally.
3. Multiple domains are supported.
4. Robust and convenient real-time logging and diagnostics are available.
5. Nested groups are not automatically included when synchronizing from parent groups.
6. VB script is no longer used.
7. Security has been improved.
8. Synchronization is managed as a standalone service.

### Requirements

1. RightFax 9.0 SP2 w/ Hotfix 2 (or greater) installed.
2. WorkServer Active Directory synchronization must be disabled.
3. An Active Directory account. A domain admin account may also be required (see **Installing the Captaris Sync Module** below).
4. A RightFax account with administrative access.
5. Knowledge of the authentication method used by your SQL or MSDE server (Windows or SQL authentication).

**Important:** After applying this update, WorkServer synchronization must remain disabled. Running both synchronization methods is not supported.

### Upgrading to the Captaris Sync Module

Follow the steps below if you are upgrading to the Captaris Sync Module from the RightFax Sync Module hotfix.

1. Log on to the RightFax server as an Administrator.
2. Stop all RightFax services.
3. Open a command prompt and browse to the **\RightFax\CapaSync** directory.
4. At the **\RightFax\CapaSync** directory type **capasync /upgrade** and hit enter.
5. Open the Windows Control Panel and double-click the **Captaris Sync** applet.
6. Click the **Select Service Account** button. Re-enter the service account password and click **OK**.
7. Open a command prompt and browse to the **\RightFax\Sync** directory.
8. At the **\RightFax\Sync** directory type **rfsync /uninstall** and hit enter. This will remove the RightFax Sync Module hotfix.

## Configuring the Captaris Sync Module

To configure the Captaris Sync Module, open the Windows Control Panel and double-click the Captaris Sync applet. This will open the **Captaris Sync Module Configuration** dialog box (below).

**RightFax Sync Module Configuration**

**General** | Logging

**Sources & Destinations**

Synchronization is performed between any number of sources and destinations. You must define at least one source and one destination before synchronization can occur.

Sources & Destinations...

**Mappings**

Each mapping defines how and when a particular source and destination should be synchronized.

| Source | Destination | Transform | Schedule |
|--------|-------------|-----------|----------|
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |
|        |             |           |          |

New...  
Edit...  
Delete...

Service Account... OK Cancel Apply

**Note:** After the initial opening of the Sync Module from the Windows Control Panel and clicking OK, you will subsequently be able open the Captaris Sync applet in Enterprise Fax Manager by double-clicking the service or

by right-clicking and choosing **Configure Service**.

### **Service Account**

The **Service Account** button along the bottom of the applet is used to select the Windows account under which the Sync Module will run. This account must be a member of the Active Directory Domain Users group. If you configure the Sync Module to detect deleted users in Active Directory, corresponding RightFax users will also be deleted. In order to use this function the service account must then be a member of the Domain Admins group.

**Security Note:** If a password is specified for the service account, the password is only retained until the control panel closes. It is not saved.

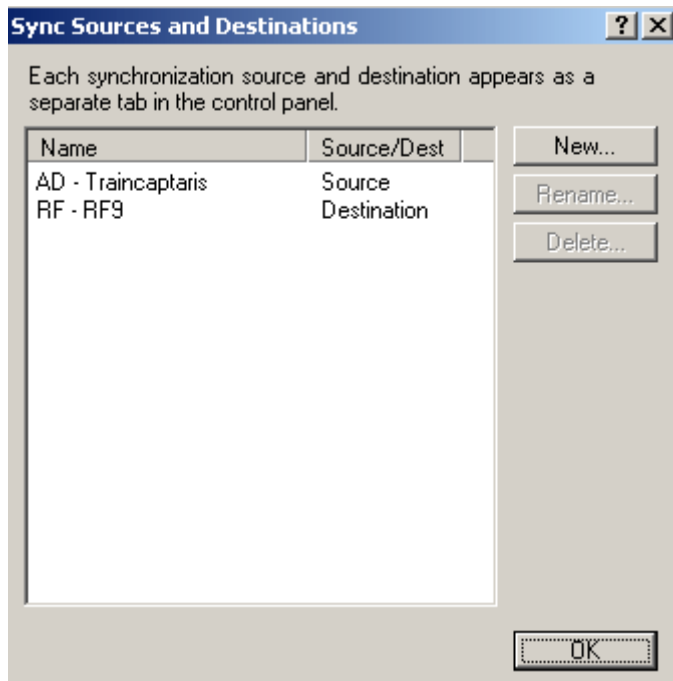
### **Sources and Destinations**

Sources and Destinations are terms used to describe the Active Directory you are synchronizing from (source) and the RightFax server you are synchronizing to (destination). Both the source and destination will be represented in the Sync Module applet by their own tab. There is no limit to the number of sources and destinations you can define.

After defining at least one source and one destination, you can define a mapping between them. A mapping associates Active Directory attributes with RightFax attributes. For example, in the properties of each Active Directory user you will find a Telephones tab > Fax Number field. In this field is the users fax number (e.g., 555-1212). By default the Sync Module will take the last four digits of this number and place it in the 'Routing Code' field of each RightFax user. Controlling how this and other data will be transformed can be done using the transform file and the RightFax user template (described below).

#### **To define your source and destination**

1. Select the **Sources & Destinations** button.
2. Using the drop-down menu select your source (Active Directory) followed by your destination (RightFax).
3. The source and destination should now be displayed in the **Sync Sources and Destination** window. Click **OK**.



## Creating Mappings

Mappings define how and when sources and destinations are synchronized. You can define as many mappings as you need, and previously defined sources and destinations can be used in more than one mapping. This allows, for example, a single Active Directory source to be synchronized into two different RightFax servers, or two different sources to be synchronized to a single RightFax server.

### To create a new mapping

1. Select the **New** button.
2. Choose your **Source** and **Destination** using the drop-down arrows.
3. In the **Sync Mapping** window browse to the '\\RightFax\\Shared Files\\Sync\\Config\\Default Active Directory to RightFax.xml' file. This **Transform File** is responsible for transforming the data generated by the source into an XML file that is translated by the destination. Together with the RightFax User Template (described in the **Destination** section), this file can be edited to create a custom synchronization template that fits the needs of your environment.
4. Select the synchronization schedule option that best suits your environment.
5. Click **OK**.

## Source Settings

The **Source** tab (*AD- Domain*) provides administrators the ability to configure settings associated with the Active Directory source. This tab also contains three sub-tabs (**Filters**, **Output**, and **Special**). Each of these is explained

below.

## Filters

Filters are a set of parameters used by the Sync Module to determine which users are synchronized from Active Directory into RightFax. For each set of users you must choose a corresponding domain followed by optional OU's or groups to limit which users are included (at least one OU or group is required). You may also choose to exclude users that are in certain groups. If you do not assign a filter, synchronization will not occur.

### To create a new filter

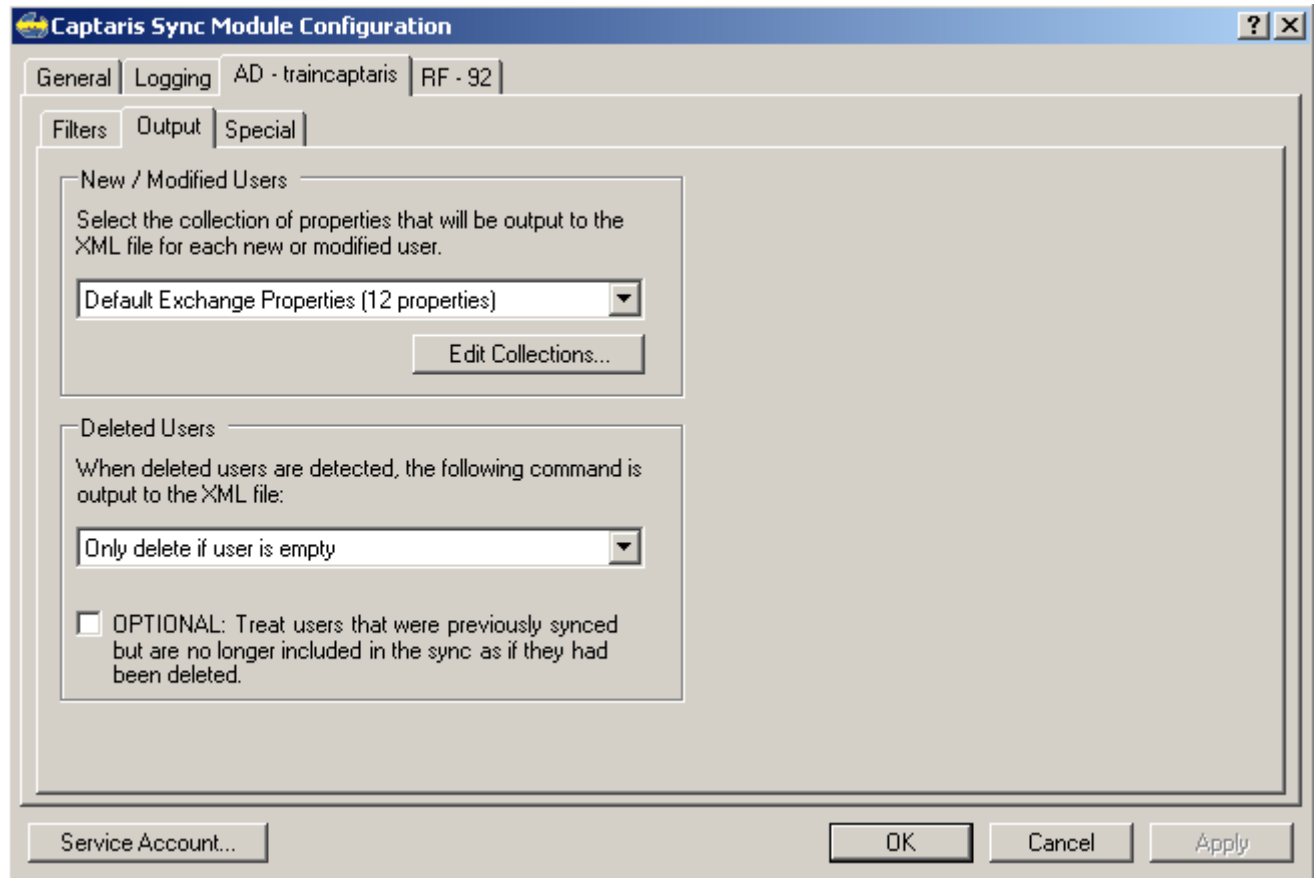
1. Select the **New** button.
2. In the **Define Filter** window, browse to your Domain and click **OK**.
3. If desired, browse and select Organizational Units (OU) by placing a check box next to each OU.
4. If desired, add an included group(s).
5. If desired, add an excluded group(s).
6. Click **OK**.

**Important:** When synchronizing with Active Directory nested groups and OU's are NOT automatically included. This allows for finer control of which groups and/or OU's are and are not included. Also note that when browsing for a group that resides in a child domain, you must change the Windows browser to point to the child domain you are attempting to browse to. By default the Windows browser will select the parent domain for directory searches. Use the **Locations** button to browse and select the correct domain.

## Output

The **Output** tab allows you to specify the output data for each new, modified or deleted Active Directory user that is found during a synchronization event. This data will then be transformed by using the transform file from the

Active Directory format into a format suitable for the destination (RightFax).



For new and modified users, you can select any number of Active Directory properties, as long as the property can be represented as a text string. Two predefined property collections are available: 'Default Windows Properties' and 'Default Exchange Properties'. These contain typical properties for use with Windows and Exchange users, respectively.

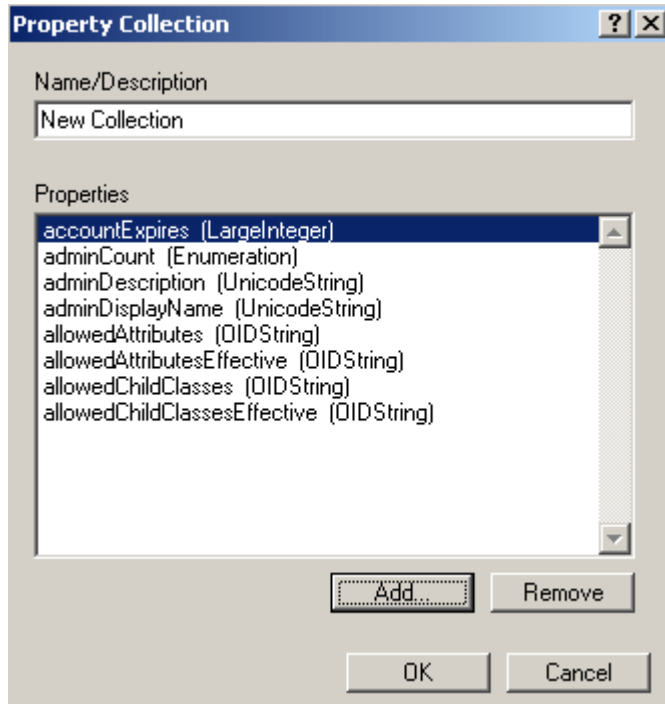
**Note:** These property objects correspond directly to the defaults shipped with the previous Active Directory Synchronization module.

The **Deleted Users** section allows you to control how RightFax will treat those users who have been deleted from Active Directory. By default, the user is only deleted if it is "empty", which is defined as without any documents or phonebook entries. Other options are to always delete users or to never delete users.

**WARNING!** Combining the option to "Treat users that were previously synchronized but are no longer included in the sync as if they had been deleted" with "Always delete user" can result in a large-scale deletion of users and their faxes. Use with extreme caution.

**Property collections** can be managed by clicking the **Edit Collections** button. The two bundled property collections cannot be modified. You can however select the **Copy** button to create an editable copy of either. **New** collections are defined by assigning a name and then choosing one or more properties that will belong to the collection. Properties are selected using the **Property Picker** dialog box. One or more properties can be selected

at a time.



## Special

With the previous Active Directory Synchronization module you had the option of creating custom VB script based profiles. If you have created custom profiles, they can be imported as XSLT files and subsequently available as a **New/Modified Users** collection property.

Do be aware however that most of functions that previously required VB script are now easily accomplished using the XSLT transform file ('\\RightFax\\Shared Files\\Sync\\Config\\Default Active Directory to RightFax.xsl') and the RightFax User Template (described in the **Destination** section) thus importing previous profiles may not be necessary.

**Important:** Due to significant architectural differences between VB script and XSLT, previously built custom profiles will likely require further editing to map VB attributes to XSLT attributes.

### To Import a VB Script Profile:

1. Select the **Import** button.
2. In the **Import Profile** window, select your custom profile and click **OK**.
3. Save the file to the \\RightFax\\Shared Files\\Sync\\Config folder.
4. Select the property collections you'd like imported with the profile and click **OK**.
5. If your custom code contains 'TODO' comments you will receive the warning below. Click **OK**.

## Destination Settings

The **Destination** tab (*RF- RightFax Server*) provides administrators the ability to configure settings associated with the RightFax server destination. This tab also contains two sub-tabs (**Servers** and **Users**). Both of these are explained below.

### Server

The **Server Name** field is where the RightFax (destination) server name is entered.

The **RightFax Account** determines which account will be used when the Sync Module needs to access the RightFax server. Since the Sync service can create and delete users, this account must have "Administrative Access" permission. It is recommended that a new account be created specifically for use by the Sync service. Further, it is recommended that the account be set to NT authenticate to the Windows account under which the Sync service runs (see above).

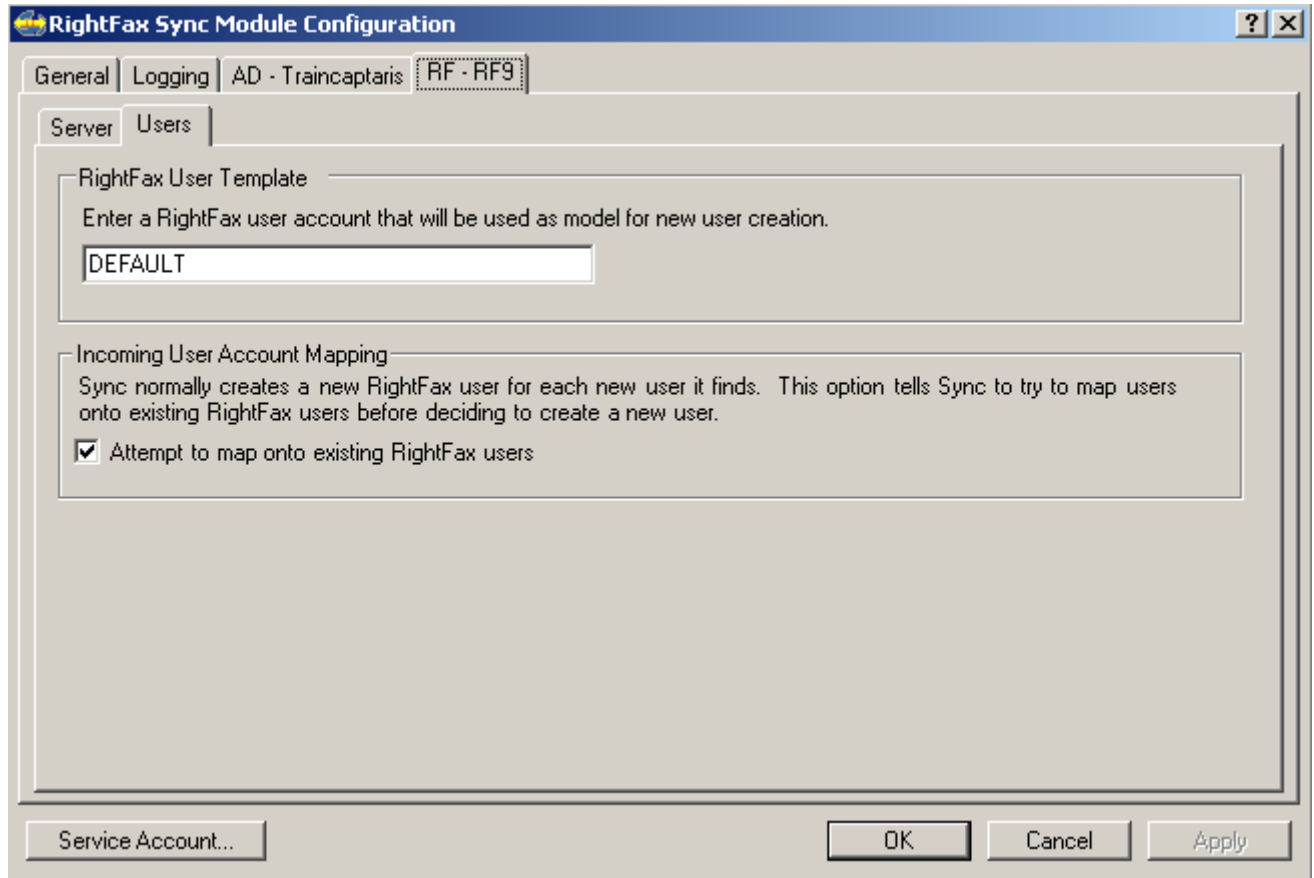
**Note:** If a password is specified for this account, the password is saved in the RightFax server's registry using high-level encryption. If you wish to avoid this, use the NT authentication technique described above.

### Users

Enter a RightFax user account that will be used as model for new user creation. New users will inherit all settings associated with the specified user. You can set up multiple RightFax/Destination profiles, each with a different model user. This allows for all manner of customization, such as having different users synchronized into different RightFax groups, or with different RightFax permissions and so on.

**Note:** This feature can be used to easily implement functionality that was performed using custom VB script in the

previous Active Directory Synchronization module.



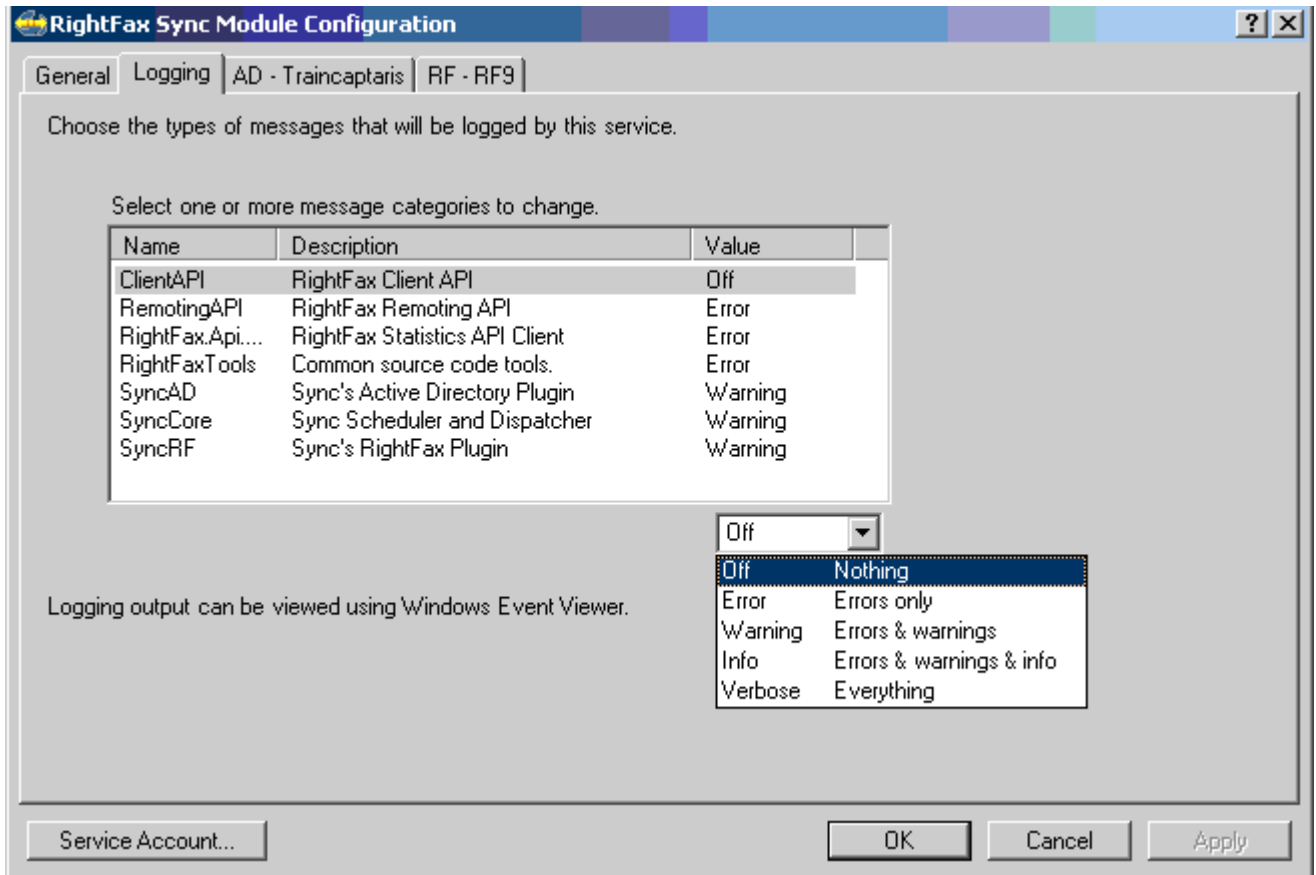
## Troubleshooting

The Captaris Sync Module provides administrators with convenient and customizable real-time logging and troubleshooting tools.

### Logging

The **Logging** tab allows RightFax administrators to control the types of messages that will be logged by the Sync Module. Each of these messages can be customized using categories and a corresponding logging level. By default all output is written to the Windows Event Logs, except when the service is running in diagnostics (debug)

mode, in which case the messages are displayed in real-time via the diagnostics window.



## Diagnostics

Like all RightFax services, the Sync Module can be run in 'debug' mode. Using the Sync Module in this mode provides RightFax administrators with robust real-time monitoring, logging, and troubleshooting via a new diagnostics window. From this window it is possible to customize the trace (logging) level, group by processes, and save the output to an RTF or TXT file. Errors and warnings are also displayed in different colors, making it easier to pick out problems.

The diagnostics window also allows the service to be started, stopped, paused and resumed, all without leaving the window.

### To run the Sync Module in debug mode

1. Open EFM and browse to the services view in the lower-right corner.
2. Right-click the Captaris Sync Module and choose **Stop**.
3. When the service has stopped, right-click the service and select **Debug**. This will launch the **Diagnostics** window.



possible to restart the service by clicking **OK** in the Sync Module Control Panel applet. Setting the service that runs the Sync Module (capasync.exe) to manual will prevent this problem however this is only recommended when performing complex debug associated troubleshooting.

**Verifying User Synchronization**

Users that have been created via the Sync Module are displayed in Enterprise Fax Manager with a corresponding green bullet next to their user icon. Users who do not display this marker have not been updated or created via the Sync Module.

| ID                                                                                              |
|-------------------------------------------------------------------------------------------------|
|  DEFAULT       |
|  ADMINISTRATOR |
|  STUDENT       |
|  STUDENT04     |
|  RFX           |
|  STUDENT02     |
|  STUDENT05     |
|  STUDENT03     |
|  STUDENT06     |
|  STUDENT01     |