



The Right Chemistry

OLI Tips #65

Interacting with OLI Technical Support

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Overview

OLI Systems, Inc. has been providing software for the chemical industries since 1971. During that time, technical support has been a primary focus. To help facilitate the user interacting with OLI's technical support document, there are some things that the user should know.

There are many tools to interact with Tech Support. These tools are:

- Live phone support
- E-mail support
- Web based support
- Web based knowledge base
- Web based live training & support

- Off-line web based training
- FTP Site to upload and download files

Before contacting Tech Support, the user should be prepared to send the files that are causing the problems. These files are different depending on the program being considered. Sending the files may also cause some virus protection programs to strip the files from E-mail.

OLI File Structures

OLI Analyzers

The files used by the OLI Analyzers are binary files. Some of these files may cause a virus protection alert when being E-mailed to OLI. This situation will be discussed later in this document.

Table 1 Analyzer File Extensions version 3.0 and later

| Program | File Extension |
|---|----------------|
| OLI Studio (contains Stream, Corrosion and EVS) | .oad |

For versions before 3.0 there are four (4) Analyzer programs. Each has its own file extension. You will need to turn on File Extensions in Windows. See the Appendix on how to turn on the extensions.

Table 2 Analyzer File Extensions version 2.0 and earlier

| Program | File Extension |
|--------------------|----------------|
| Stream Analyzer | .sta |
| Corrosion Analyzer | .cra |
| Lab Analyzer | .laa |
| Score Analyzer | .sco |

ScaleChem

ScaleChem has several files that are of importance. One of the files is a binary file (SCA) and is most commonly sent for technical support. Other files are text files and they may be required occasionally.

Table 3 ScaleChem Files

| Extension | Type | Description |
|-----------|--------|----------------------------|
| .sca | Binary | Primary ScaleChem file |
| .osc | Text | Primary output file |
| .sin | Text | Input file to solver. |
| .dat | Text | Brine data input to solver |

ESP

ESP creates two classes of files. The first set is for the chemistry model. The second set is for the process model. All files are text

Table 4 Chemistry Model files

| Extension | Class | Description |
|-----------|--------------------------|--|
| .mdl | User input | Model definition file. This file contains the user's input chemistry |
| .mod | Generated/modifiable | This is a text version of the chemistry model. It can be modified by the user |
| .dbs | Generated/non-modifiable | This is the numeric version of the database. It can not be modified by the user. |

Table 5 Process Model files

| Extension | Class | Description |
|-----------|------------|---|
| .bin | User Input | This is the process input file. |
| .bst | Output | This is the stream output file. This file generates the stream listings |
| .bre | Output | This is the block report file. The block reports come from this file. Also, this file is used to Restart multistage unit operations |
| .bou | Output | This is the block output file. The process trace listing (the order of blocks) is found in this file. All the stream and block information is stored in this file. Rarely sent to OLI |
| .TEA | Output | Tear Stream restart file. This is available only in ESP v7.0.30 or later. Rarely sent to OLI |

OLI Databook Structure

The OLI Databooks are a series of 39 files for each databook. The first three characters of a databook must be unique in a folder and must not be the same as any database stored in the following folder:

C:\ProgramData\OLI Systems\Databanks\X.Y.Z

Assuming that the default installation folder is c:\ProgramData and X.Y.Z is the current version number (for example 9.2.6)

As an example, we will look at the structure of an OLI database NASALTS

NASALTS is a collection of 39 files.

Table 6 OLI Database Structure

| File | Type | File | Type |
|-------------|---------------------------------|-------------|------------------------------|
| NASVP.RAW | Vapor pressure raw data | NASALTS.SYN | Species Synonyms |
| NASSYN.NDX | Index to synonyms | NASALTS.STR | Species Structure |
| NASSTRU.NDX | Index to structures | NASALTS.SOU | Species solubility data |
| NASSOU.NDX | Index to solubility data | NASALTS.SOR | Species source data |
| NASSOR.NDX | Index to sources | NASALTS.REF | Reference data |
| NASSOLU.RAW | Solubility raw data | NASALTS.REC | Database record structure |
| NASREF.NDX | Index into references | NASALTS.RDX | Redox data |
| NASMATS.NDX | Index to material code symbols | NASALTS.NDX | Index of allspecies |
| NASMATN.NDX | Index to material code numbers | NASALTS.MAT | Material codes |
| NASMATC.NDX | Index to material code charges | NASALTS.ION | Ion Codes |
| NASLID.NDX | Index to lattice identification | NASALTS.INT | Species interaction data |
| NASIONS.NDX | Index to ion code symbols | NASALTS.EQS | Equation types |
| NASIONN.NDX | Index to ion code numbers | NASALTS.DOC | Reference data |
| NASACTI.NDX | Index to activity interactions | NASALTS.DIC | Database structure file |
| NASFORM.NDX | Index to formulas | NASALTS.DDB | Pure component data |
| NASEQS.NDX | Index to equations | NASALTS.COP | Coprecipitation data |
| NASDENS.RAW | Density raw data | NASALTS.CND | Electrical Conductivity data |
| NASDENS.NDX | Index to density data | NASACTI.RAW | Interaction raw data |
| NASCP.RAW | Heat Capacity raw data | NASINT.NDX | Index of interactions. |
| NASCAS.NDX | Index to CAS numbers | | |

As you can see, some files are named NASALTS (e.g., NASALTS.DIC) but others are named with only the first three letters – NAS (e.g., NASREF.NDX). This is important if you send the files to OLI for analysis.

To send the files to OLI, you first need to search for all the files. Using NASALTS as a reference, the search would be

NAS*.*

This may return more than 39 files. This is allowable, please place all the files into an archive such as WinZip and send them to OLI.

Aspen HYSYS

Aspen HYSYS files have an .hsc file extension. This file should be sent to OLI. If you have a private databank, this also needs to be sent to OLI, see *OLI Databank Structure* above.

Aspen PLUS

Table 7 File types required by OLI

| File Type | File Extension |
|--------------------------------|----------------|
| OLI Chemistry model (Wizard) | .cwa |
| OLI Chemistry model (standard) | .mdl and .mod |
| OLI Generated Chemistry | .dbs |
| Aspen Backup file (flowsheet) | .bkp |
| Aspen Plus flowsheet | .apw or .apwz |

Note: you need only send either the Wizard files or the Standard files, not both.

If you have a private databank, this also needs to be sent to OLI, see *OLI Databank Structure* above.

Unisim Design

Unisim Design files have an .usc file extension. This file should be sent to OLI. If you have a private databank, this also needs to be sent to OLI, see *OLI Databank Structure* above.

Chemistry Wizard (Non-Aspen PLUS)

Table 8 Stand-alone Chemistry Wizard files

| File Type | File Extension |
|-------------------------|----------------|
| OLI Chemistry model | .cws |
| OLI Generated Chemistry | .dbs |

If you have a private databank, this also needs to be sent to OLI, see *OLI Databank Structure* above.

File Uploads

With recent increases in security, sometimes it is impossible to send the required files to OLI. If this happens please use the following web site:

<http://support.olisystems.com/upload.aspx>

Live Phone Support

OLI Systems, Inc. is located in Northern New Jersey, United States. Our office hours are 8:30 AM to 5:00 PM Eastern Time (New York).

Our phone numbers are:

Support: 973-539-4996 extension 24 (USA)
Fax: 973-539-5922 (USA)

E-mail Support:

You can contact OLI via E-mail for a variety of reasons. The Emails are on the main OLI website www.olisystems.com and on the support website support.olisystems.com

Web Based Live Training and Support

OLI Systems has partnered with AQSIm to use WebEx facility to conduct live training. To use Webex, you will need to check to see if you can support the plug-in for Internet explorer.

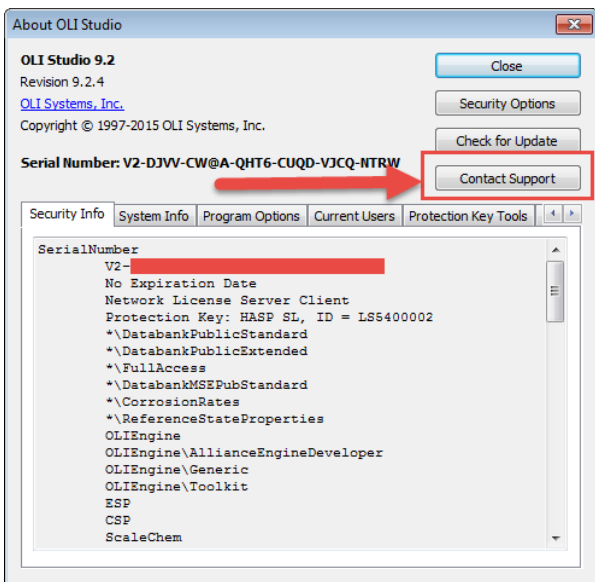
Occasionally you will need to use OLI's teleconferencing facility. OLI will supply the phone numbers as required.

Using the *Contact Support* button

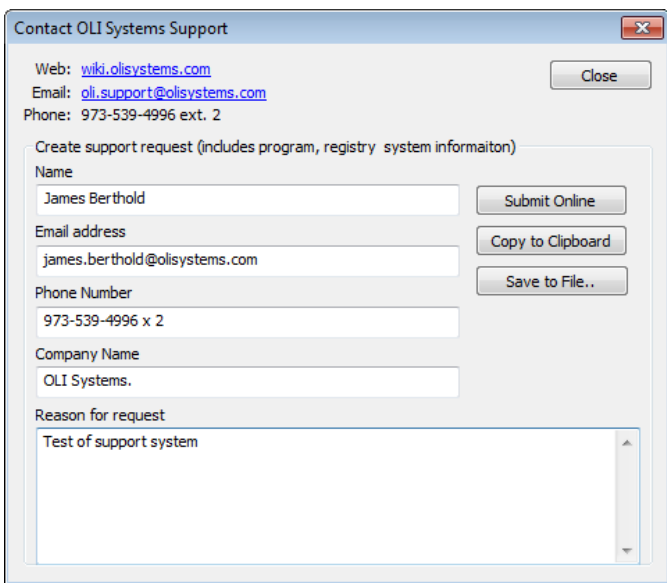
Starting with OLI Security 3.2.6 and OLI Products 9.2.6 you can now send the state of the OLI software on your computer directly to OLI. This is now accomplished via a new button on the OLI Help>About dialog or from various error dialogs.

Although the data is collected automatically, you will still be in control of actually sending the data to OLI. OLI would never send data about your computer without your permission. The data is either sent first by Email or then by an FTP-like protocol to the OLI servers. The data is sent confidentially.

Here is the location of the new button on the **Help>About** dialog:



Clicking the **Contact Support** button will give you a new dialog:



Please enter the text fields. A comment as to what you were doing is also helpful.

What about privacy? What information is sent to OLI with this function?

Using the information in the image above, the following was sent to OLI.

General Information

Company: OLI Systems. User: James Berthold Email: james.berthold@olisystems.com Phone: Comments: Test

Security Information

This is data primarily about the products enabled by the stand-alone or client serial numbers. The example below is for a network version. The stand-alone or client serial number is displayed.

```
[Security Info] SerialNumber
V2-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX
No Expiration Date
Network License Server Client
Protection Key: HASP SL_ID = LS5400002
\DatabankPublicStandard
\DatabankPublicExtended
\FullAccess
\DatabankMSEPubStandard
\CorrosionRates
\ReferenceStateProperties
OLIEngine
OLIEngine\AllianceEngineDeveloper
OLIEngine\Generic
OLIEngine\Toolkit
ESP
CSP
ScaleChem
StreamAnalyzer
StreamAnalyzer\Tester
CorrosionAnalyzer
CorrosionAnalyzer\Automation
SCOREAnalyzer
SCOREAnalyzer\SCORETemplateCreation
StudioScaleChem
StudioPIPESIM
CCModeler
OLIBridge
OLIHightemp
EVSAAnalyzer
```

Network Information

This information is about the network connections if you have this version. Stand-alone versions will not display this information. The server serial number will be displayed.

```
Network Security Server Binding
'ncaen_ip_tcp:granite[12345]'
Network Security Information
Expiration Date = 12/31/2015
Serial Number = V2-YYYY-YYYY-YYYY-YYYY-YYYY-YYYY
Hardlock ID = LS5400002
```

License Usage

If permitted by your administrator, the license count for the products is also displayed.

| Products | Max | Used | Avail |
|-------------------|-----|------|-------|
| CorrosionAnalyzer | 25 | 2 | 23 |
| ESP | 25 | 0 | 25 |
| EVSAAnalyzer | 25 | 2 | 23 |
| OLIEngine | 25 | 2 | 23 |
| ScaleChem | 25 | 0 | 25 |
| StreamAnalyzer | 25 | 2 | 23 |

Operating System Information

We will collect information about your operating system.

```
[System Info] Windows 7 Professional (6.1.7601) Service Pack 1
```

```
System type: 64-bit Operating System
```

```
Available Memory 2475796 KB
```

```
Total Memory 4194303 KB
```

```
Swap File Used 0 KB
```

```
Swap File Max. 4194303 KB
```


OLI Plug-ins Installed

OLI uses some plug-ins (which OLI authored) and they are listed next.

[Program Options] OLI Studio Plug-Ins

Name: Stream Analyzer (Installed)

Path: C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\StreamAnalyzer.olx

Version: Build 9.2.4

Name: Corrosion Analyzer (Installed)

Path: C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\CorrosionAnalyzer.olx

Version: Build 9.2.4

Name: EVS Analyzer (Installed)

Path: C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\EVSanalyzer.olx

Version: Build 9.2.4

Name: Studio ScaleChem (Installed)

Path: C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\StudioScaleChem.olx

Version: Build 9.2.4

Name: OLI File Viewer (Installed)

Path: C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\OliFileViewer.olx

Version: Build 9.2.4

Program Load Log

We will copy the information you see on the OLI Splash Screen.

[Log] Loading 'OLIEngine'.

Loading 'StreamAnalyzer'.

Loading 'CorrosionAnalyzer'.

Loading 'EVSAnalyzer'.

Loading 'StudioScaleChem'.

Loading 'StudioPIPESIM'.

DLL Loads

The DLL files that OLI loads is also captured. Most of these files are authored by OLI Systems but a few are part of the operating system. The version number of the DLL is also captured. The following is only a partial list of what we collect.

ExePath=C:\Program Files (x86)\OLI Systems\OLI Studio 9.2\Studio\OLISudio.exe

RegistryKeyName=OLI Studio 9.2

ProductName=OLI Studio

SerialNumber=V2-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX

SerialData=

SecurityOptionToCheck=

VersionMajor=9

VersionMinor=2

VersionRevision=4

VersionBuild=0

HasDocumentsDirectory=true

DocumentsDirectoryPath=

HasSamplesDirectory=true

SamplesDirectoryPath=

RegUseSecurityKey=true

AllowAutoLogin=true

CommonFilesPath=C:\Program Files (x86)\Common Files\OLI Systems\

Files in - C:\Program Files (x86)\Common Files\OLI Systems\

OLIClientSecurityProvider.dll - [3.2.5] OLI Security

OLIHtmHelp.dll - [1.0.3] OLI HTML Help Support Library

OLIProcessSecurityProvider.dll - [3.2.5] OLI Security

OLIProcessSecurityV1.dll - [2.1.14] OLI Security

Registry Entries

The OLI related registry entries from both current user and local machine are captured. This example is only a partial list:

[HKEY_LOCAL_MACHINE\Software\OLI Systems\Analyzer 2.0\Common\Application]

"TemplatesDirectory"="C:\Program Files (x86)\OLI Systems\Analyzer 2.0\Templates"

"SerialNumber"="V2-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX"

"SamplesDirectory"="C:\Program Files (x86)\OLI Systems\Analyzer 2.0\Samples"

"SerialNumberTimeStamp"="10-1-2014 11:04:48"

"SerialData"=""

Appendix

How to turn on file extensions in Windows 2000 and XP?

From **My Computer** select **Tools** and then **Folder Options**. Click on the **View** tab. Uncheck the **Hide extensions for known file types**.

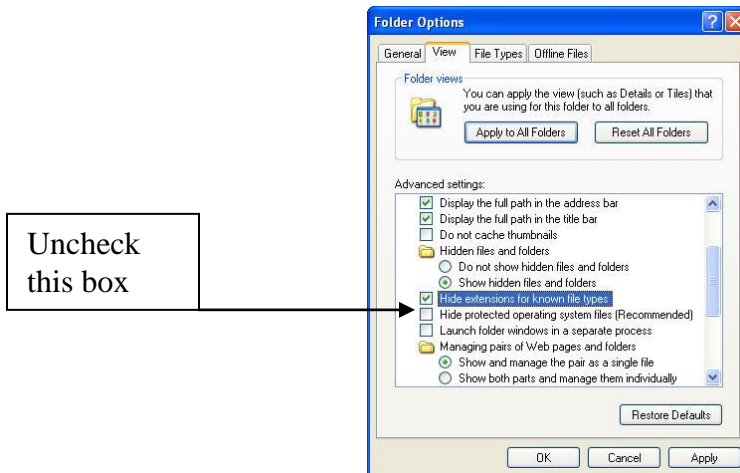


Figure 1

Click the **Apply** button and then **OK**.