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CSC Financial Integration

For InfoLease

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Introduction

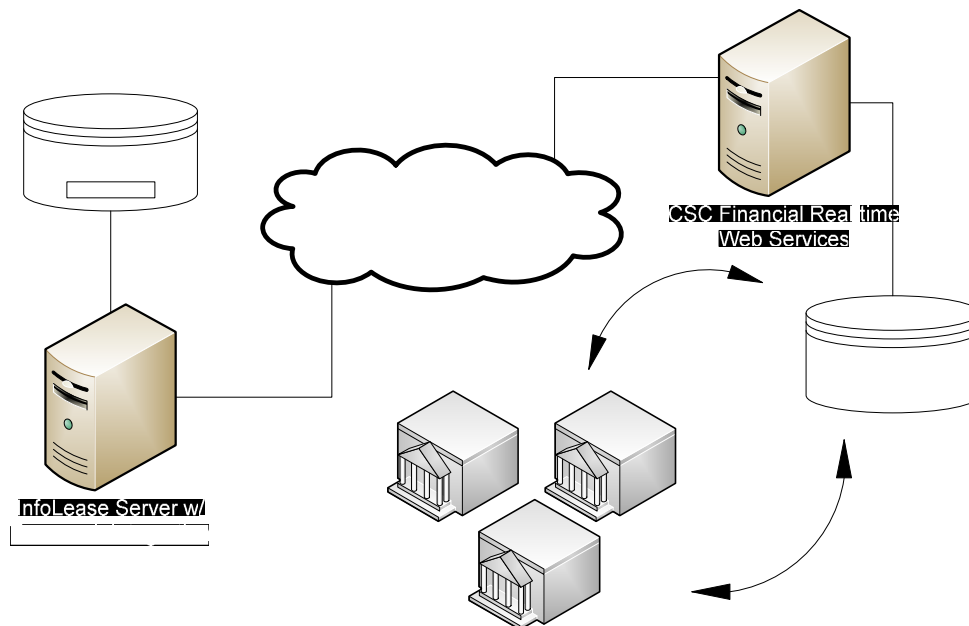
Tamarack Consulting's **CSC Financial Integration for InfoLease** allows your InfoLease system to communicate directly with the [CSC Financial Online](#) web site. By integrating with CSC Financial Web Services architecture, all of your UCC Filing tasks can be completed within InfoLease, thus eliminating the need for duplicate entry or uploading UCC updates via batch processing.

In addition to providing users with the ability to perform the UCC functions directly within InfoLease, this integration facilitates automated updates between InfoLease and CSC Financial without any user intervention. Specifically, the following interaction between systems can be configured:

- 1) New Filings can be automatically sent from IL to CSC Financial. Upon receipt, CSC will return the Order Number to InfoLease. This will be stored on the Filing record.
- 2) UCC updates and approval requests can be submitted in real-time from InfoLease to CSC Financial.
- 3) InfoLease can be scheduled periodically query CSC Financial database requesting detailed information on Orders that have been updated and/or received a status change. These updates will be automatically stored in the InfoLease Filing record.
- 4) Automatically download and store PDF documents from CSC Financial.

Architecture

This integration was developed in the native InfoLease environment **UniData** and communicates directly with the web services offered via the CSC Financial Software Development Kit (SDK) using Extensible Markup Language (XML) and Simple Object Access Protocol (SOAP) over HTTP and HTTPS.



System Requirements

In addition to the existing InfoLease environment, the following prerequisites exist:

- 1) UniData Version 6.1 or higher (Includes UniBasic Extensions).
- 2) The InfoLease server must have access to the internet via HTTP (port 80) and HTTPS (port 443). As all communication originates from the InfoLease server, no additional port configurations are required in the firewall.
- 3) Valid account credentials from CSC Financial.

Installation & Configuration

Installation

```
SETFILE /info/tamarack/TCI.BP TCI.BP
```

```
RUN TCI.BP INSTALL.CSC
```

```
CSC.PARAM.SCR
```

```
RUN TCI.BP CSC.DOWNLOAD.JURISDICTIONS
```

Depending on your InfoLease platform(s) and location of production and test environments, there are a number of ways to install the integration.

Example 1

If your InfoLease production, QA and test environments reside on individual servers (Unix or Windows), the CSC Financial Integration can be installed in the UniData global catalog space. All databases under this server would have access to the integration.

Note The User-Defined menus must be updated on each database.

Example 2

If you have production and test InfoLease databases on the same server (Unix or Windows), the installation must be performed on each database to facilitate recommend code management.

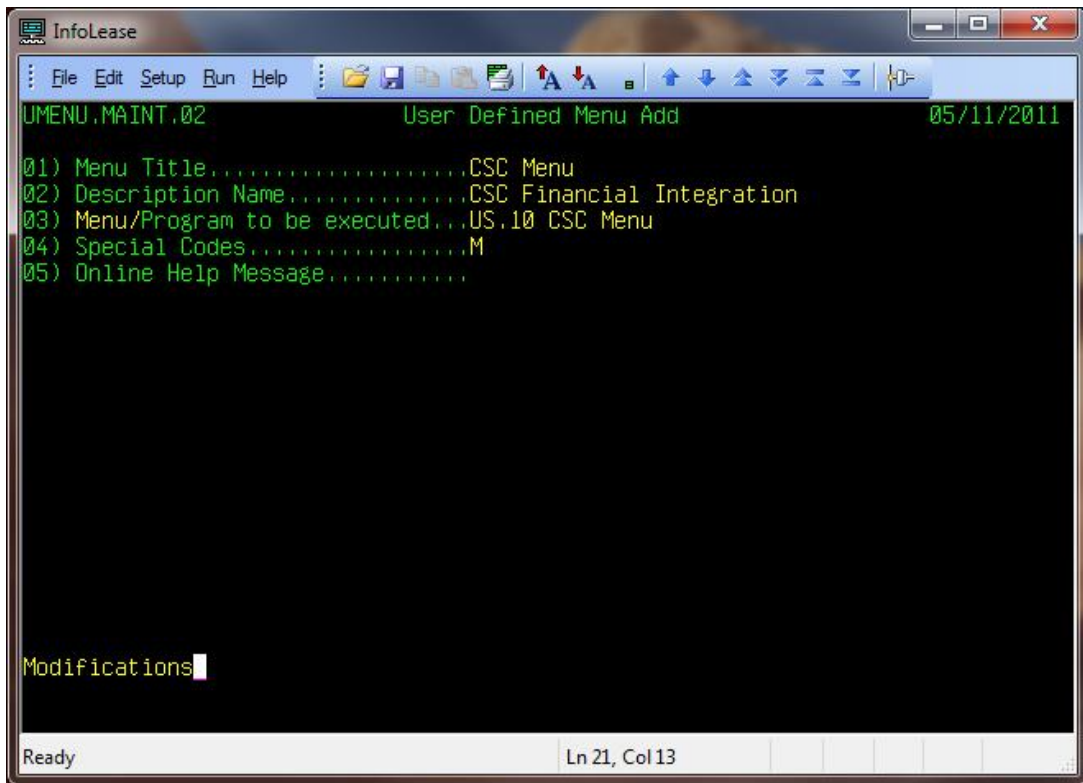
Contact Tamarack Consulting, Inc. to receive the integration programs and identify the installation that best suits your environment.

Configuring User Defined Menu Group

Once the programs have been compiled and catalog in the InfoLease environment, login using the InfoLease Master User ID to create a new User Defined Menu to house the integration. To access this option follow the menu path:

```
System Maintenance Menu
  InfoLease Utility Menu
    User Defined Menus
```

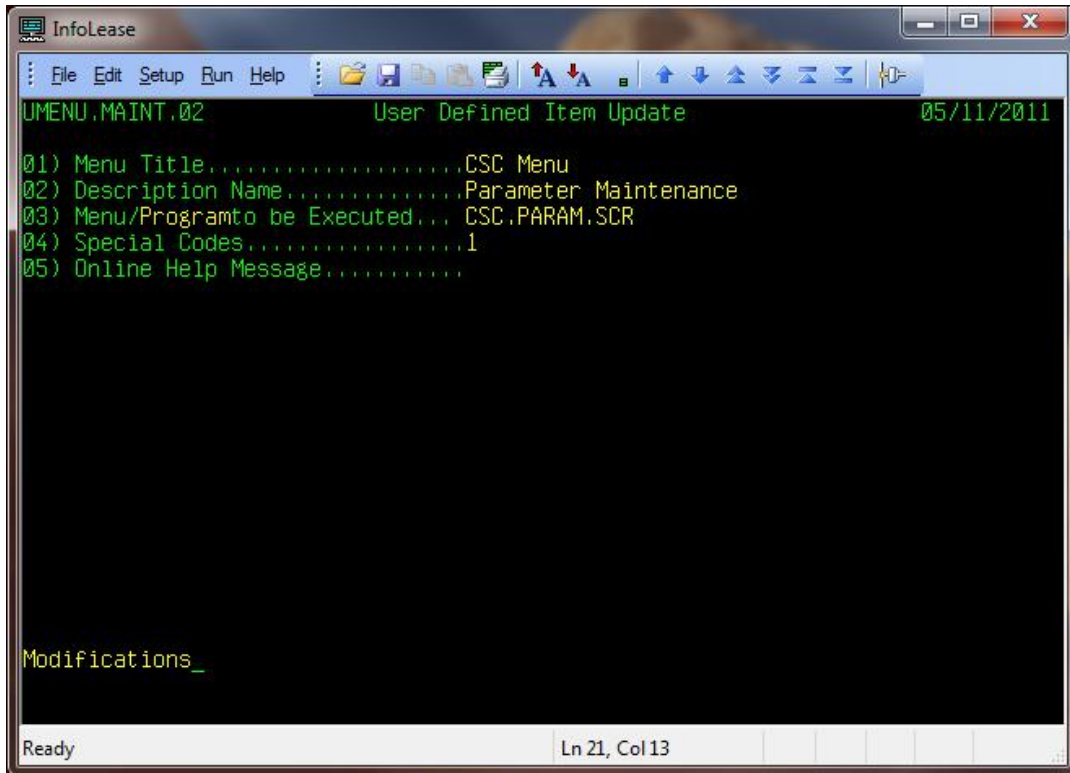
Once in the User Defined Menus, navigate to the 'root' location you would like use as the entry point to these utilities and type "AM" to "Add Menu" item. For example, use the "Interface Menu" as the root menu for the CSC Financial integration. Enter a Menu Title and a Description Name for this new Menu. For example:



```
InfoLease
File Edit Setup Run Help
UMENU.MAINT.02 User Defined Menu Add 05/11/2011
01) Menu Title.....CSC Menu
02) Description Name.....CSC Financial Integration
03) Menu/Program to be executed...US.10 CSC Menu
04) Special Codes.....M
05) Online Help Message.....
Modifications
Ready Ln 21, Col 13
```

Note The Menu/Program to be executed and Special Codes are system generated. Simply accept the default.

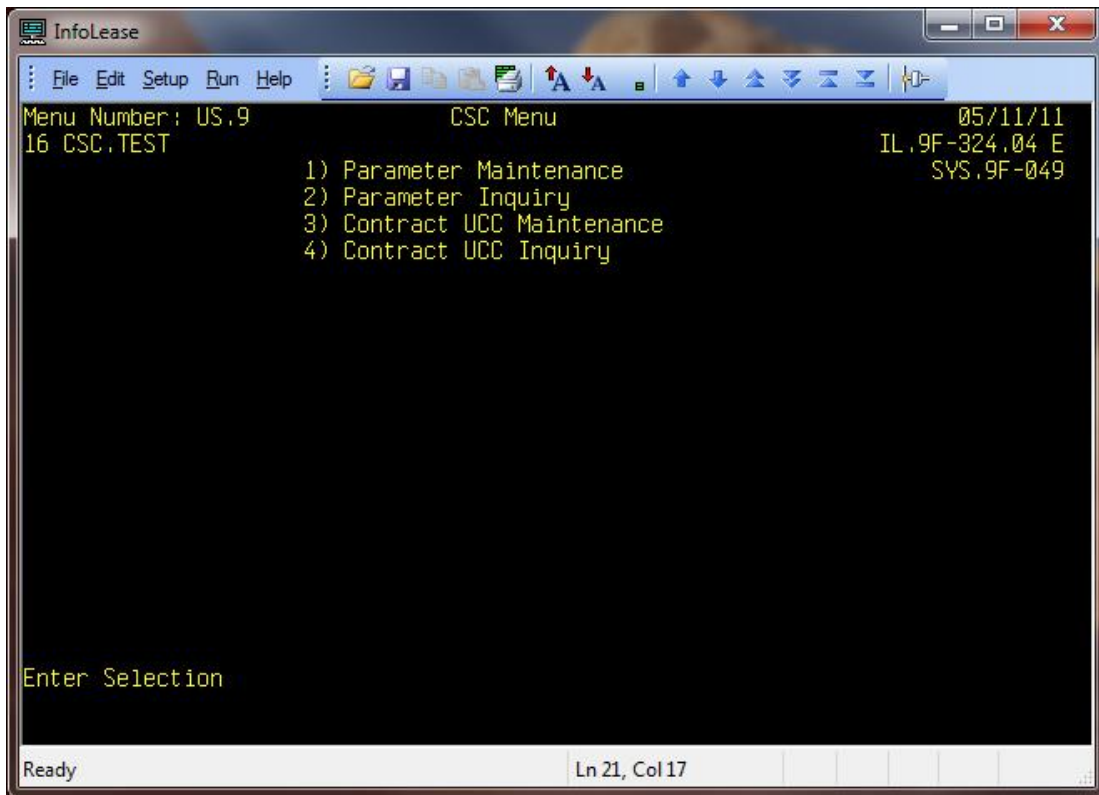
At this point, you can use the “A” option to add items to this new menu group. The Menu Title will default from the previous screen. Enter an appropriate description for each Description Name, and enter “P” for program when prompted for ‘Menu’ or ‘Program’. For example:



Repeat this process for the remaining utilities:

- 1) Menu Name: **CSC Parameter Inquiry**
 - a. Program Name: **CSC.PARAM.SCR**
 - b. Special Codes: **0**
- 2) Menu Name: **CSC Contract Maintenance**
 - a. Program Name: **CSC.CONTRACT.SCR**
 - b. Special Codes: **1**
- 3) Menu Name: **CSC Contract Inquiry**
 - a. Program Name: **CSC.CONTRACT.SCR**
 - b. Special Codes: **0**

Once completed, you should have a new Menu Group that looks similar to:



Note After completing the creation of this new User Defined Menu, be sure to select "Re-Build Menus" from the InfoLease Utility Menu.

Note If you do not have the InfoLease "Security" module, please contact Tamarack Consulting.

Configuration

Before communications between CSC Financial and InfoLease can begin, a number of parameter and table settings must be defined or updated. Use the CSC Financial Parameter Maintenance screen to fulfill these requirements.

Parameters

```
InfoLease
File Edit Setup Run Help
CSC.PARAM.SCR          CSC Financial          05/11/2011
          Parameter Maintenance

1) CSC Financial URL
   http://eservices-test.diligenz.com/EServices.aspx
2) Account Number : 346620
3) Login GUID    : 03CBDEC3-D966-41BF-B32E-3CE48DCB461E
4) Contact Number : 1
5) Timeout       : 300000
6) Log Level     : 9
*7) Status Code Mapping
*8) User Defined Mapping
9) Document Folder: D:\info\TCI\csc
   AS.UCC Trigger : OFF
   GetChanged Date: 05/02/2011
   GetChanged Time: 12:30:12

Selection

Ready          Ln 22, Col 10          CAP
```

Your CSC Financial Account Representative will provide the following parameters:

CSC Financial URL

Account Number

Login GUID

Contact Number

Note: The Contact Number will be used as a default if the Integration is not able to locate a valid Contact Number for the InfoLease user performing CSC Financial functions. Specifically, the integration will use the InfoLease Logon ID and attempt to locate a CSC Contact Number in the “Closing” field under the Personnel Table. In order for the integration to cross-reference the Personnel Code, the IL Logon must be entered in the User ID field in Personnel Table Maintenance.

Internet Timeout – Enter the duration, in milliseconds, the integration should allow for a SOAP response from the CSC Financial web service.

Log Level – This integer, between 0 and 10, controls two level of logging for all communication between InfoLease and CSC Financial. A value of zero will disable all logging.

Log files – Each SOAP method maintains a unique log file. For example, the “CreateFiling” method will log details within “CreateFiling.log” under the InfoLease database. The greater the integer, the more detail captured.

XML files – If the log level is create than zero, all xml document sent to and receive from CSC Financial will be stored in TCI.CSC.LOG directory. For example:

- Create_001-0036733-000_request.xml
- Create_001-0036733-000_response.xml

Note See the [Administration and Logging](#) section for more details.

Document Folder – Identify the location on the InfoLease server for storage of all attachments and documents. This parameter is used with the **GetOrderInformation** web service. In addition to the Order status, this process will download Attachments and/or Documents (PDF format) into a subfolder under this parent directory. The subfolder will be the InfoLease Customer Credit Account Number. Both the document ID and the document name will be used in the name. For example:

Document Folder: C:\csc_docs

Example: C:\csc_docs\102342\5791282_National_UCC1.pfd

CSC Financial Tables

Status Code Table Mapping – Use this screen to map the CSC Financial Queue code to the appropriate InfoLease UCC Status Codes. The integration will automatically update the UCC record in InfoLease when a status change is detected.

```
InfoLease
File Edit Setup Run Help
CSC.PARAM.STATUS.MAP      CSC Financial Integration      05/11/2011
                          UCC Status Mapping Maintenance

Seq Code  CSC Financial Description      InfoLease Code/Description
-----
001) ARWIP Attachment Rcvd Work In Progress  11 - Attchmnt Rcvd WIP
002) B      Billing                               12 - Billing
003) C      Complete                               13 - Complete
004) DTJ    Delivered To Jurisdiction          14 - Delivered to Jurisdiction
005) NEW    New                                  15 - New
006) NSTR   Ack Rcvd Needs Search To Reflect    16 - Ack Rcvd Needs Search
007) PCA    Pending Client Approval             17 - Pending Client Apprvl
008) PCQC   Pending Client QC                   18 - Pending Client QC
009) R      Rejected Returned Unfiled           19 - Rejected Returned Unfiled
010) WCA    Waiting For Client Attachments       20 - Waiting for Client Atch
011) WIP    Work In Progress                     21 - Work in Progress

Selection

Ready                               Ln 22, Col 10                               CAP
```

Note During installation, it may be preferable for the system to automatically “refresh” or update the InfoLease UCC Status Codes to be more in-line with the CSC Financial codes. Please contact Tamarack to discuss the steps to perform this update.

Business Type Table – As CSC Financial accepts predefined Organization Types, updates to the InfoLease Business Type table may be required. The integration will send the description associated with the Business Type code. The valid CSC Financial Organization Types are:

Sole Proprietorship	Trustee
General Partnership	Individual
Limited Partnership	Non-Profit
Municipality	Professional Corp
LLC	Professional Association
LLP	Professional LLC
Corp.	Other
Trust	

Please contact Tamarack Consulting for assistance with updating the existing portfolio to use the recommended Business Type table.

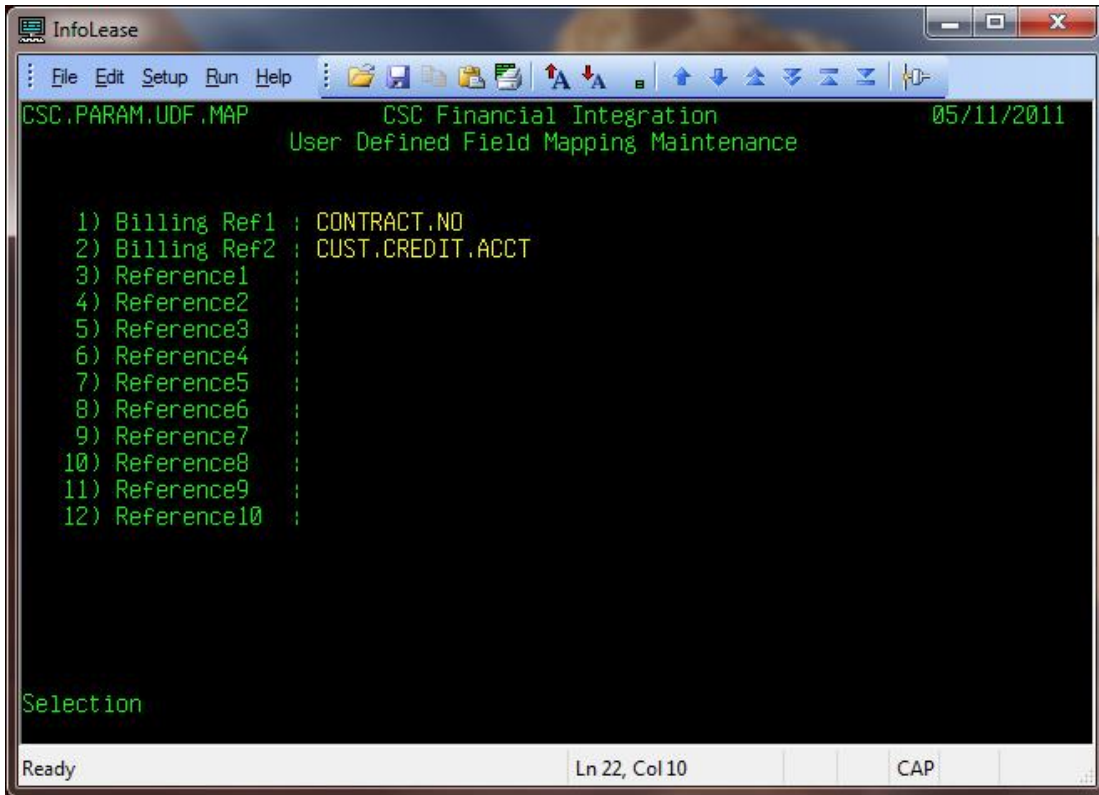
Filing Code table – To provide support for both UCC Filings (UCC1) as well Amendments and Assignments (UCC3), the integration requires the following entries in the Filing Code table:

Filing Code	Filing Description
U1	UCC1 – Initial Filing
U3	UCC3 – Amendment/Assignment
U8	UCC3 - Continuation
U9	UCC3 - Termination

The codes U1, U3, U8 and U9 codes are required, but the description can be modified without impacting the communication with CSC Financial.

Lessor Secured Party Defaults – The integration will default the Secured Party name and address from the InfoLease Lessor Defaults if no Secured Party Information has been entered on the UCC file record.

User Defined Mapping – Use this screen to map the 12 supported CSC Financial User Defined Fields to specific InfoLease fields. For example, if you wish to store the InfoLease Contract Number in the CSC Financial BillingRef1 field, map CONTRACT.NO to this location.



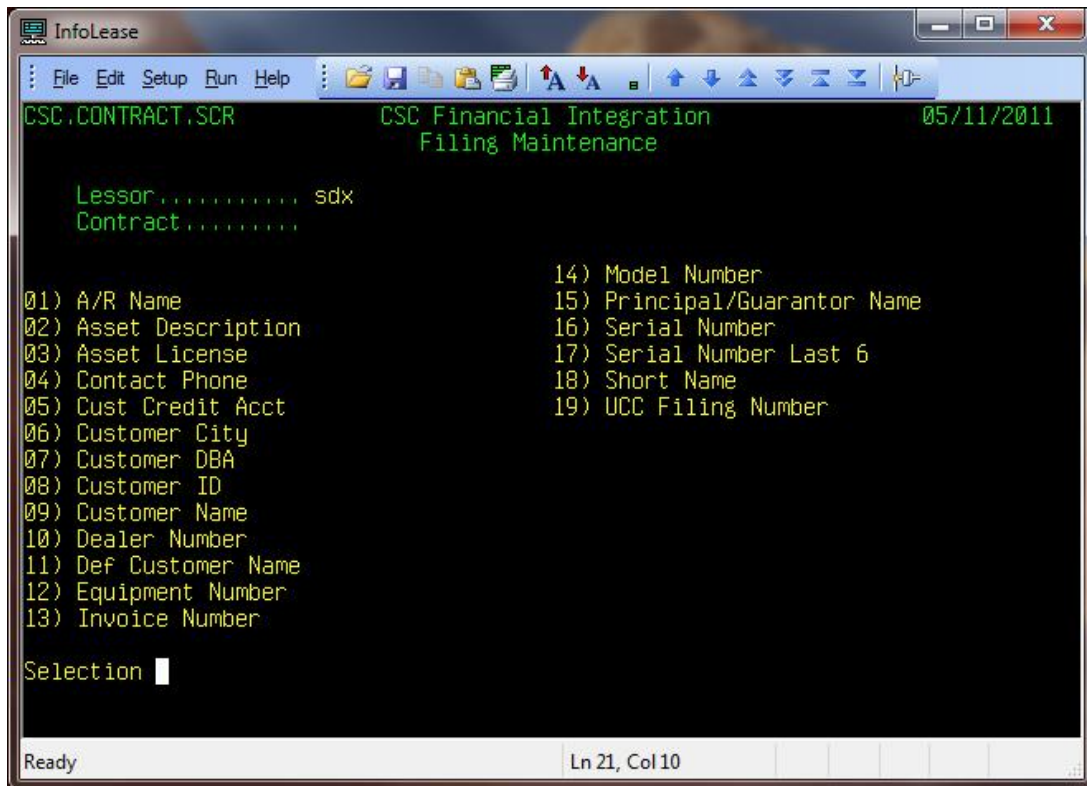
Note: All Customer, Contract, and Asset level fields are supported. To reference an Additional User-Defined field, use CS.ADDL.USER, LS.ADDL.USER, or AS.ADDL.USER respectively. Upon entering one of these three values, the integration will prompt for the position of this field in the Additional User-Defined screen. In the example shown above, Position 1 of contract Additional User-Defined fields will be sent to CSC Financial in the Reference1 field.

AS.UCC Trigger – This status will indicate the name of the database trigger that is currently running on the AS.UCC table. The database trigger controls the real-time synchronization with CSC Financial for new and updated UCC records in InfoLease. Depending on system requirements, this custom process may not be configured.

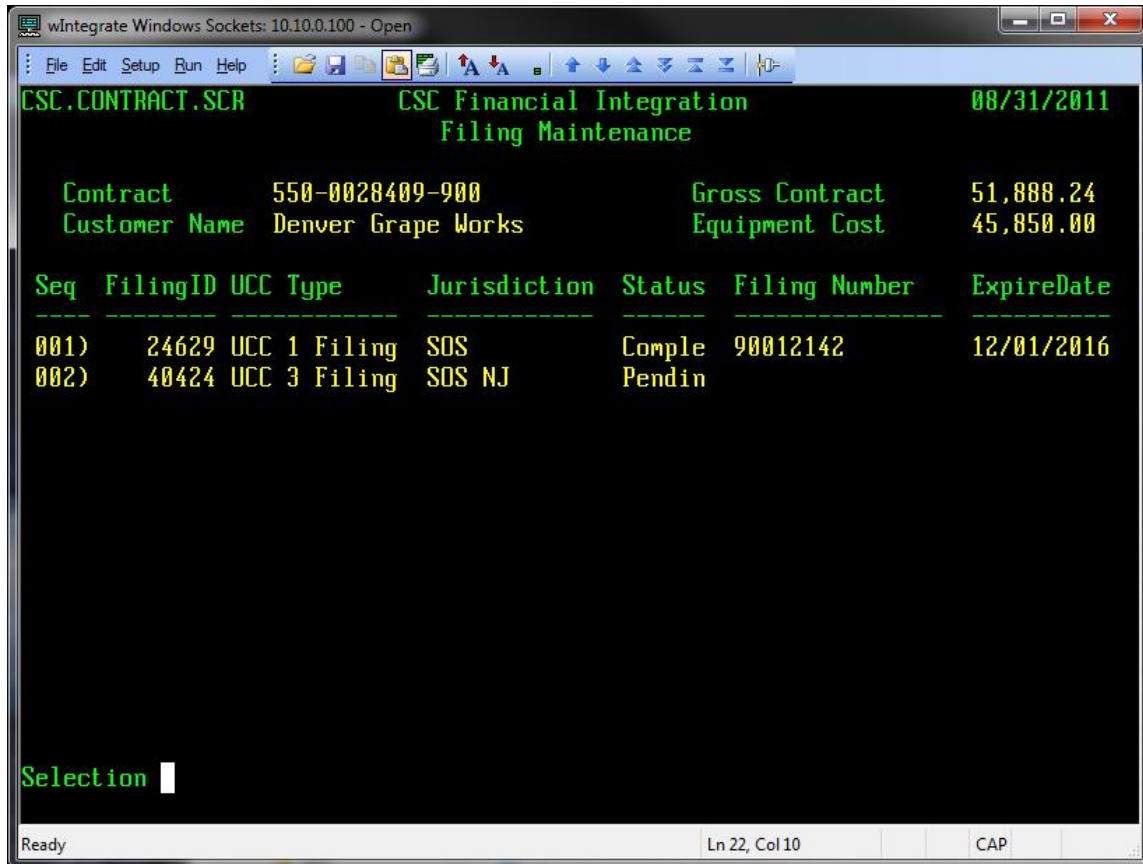
GetChanged Date & Time – These fields reflect the last date and time the integration has requested a list of all Orders that have received a status change from CSC Financial. The program CSC.GET.CHNGD.ORDER.S.PHANTOM should be scheduled through the Windows or Unix “Cron” scheduler to automatically update the corresponding Order Number in InfoLease.

Maintaining CSC Financial Filing Data from InfoLease

Using the **CSC Financial Contract Maintenance** utility, user can send/receive Filing data from with the InfoLease UCC record in addition to standard InfoLease UCC record maintenance. Contract UCC data can be accessed by keying in the contract number or, using InfoLease Soundex (SDX) searches, lookup and select contract UCC data.



Once a valid contract number has been entered, the all UCC records associated with this contract are displayed in summary mode. Select the appropriate UCC record or use “F” and “B” to page forward or backward.



Select the filing sequence number to access the detail behind this UCC record.

Note: The Filing Code (UD.FILING.CODE) must be a U1, U3, U8 or U9 in order to dictate the type of filing, UCC1 or UCC3, when communicating with CSC Financial Services.

However, depending on the specific circumstances, the integration will prompt the user to make a copy of an existing UCC record in order to proceed.

Example 1 – If the UCC record you are view is not a U1 or is a U1 record with a completed Filing Date and Number, the integration will prompt you to make a copy as a U3 if you attempt to perform an “U”pdateFiling method.

Example 2 – If the UCC3 record has been perfected and a “T”erminateFiling method is called, the integration will prompt to make a copy as a U9 to perform the Termination request.

```

wIntegrate Windows Sockets: 10.10.0.100 - Open
File Edit Setup Run Help
CSC.CONTRACT.SCR          CSC Financial Integration          08/31/2011
                          Filing Maintenance
Contract 550-0028409-900      UCC ID 24629

01) Filing Code.... U1 UCC 1 Filing      -- CSC Financial Options --
02) Jurisdiction.... SOS                | S = Submit Filing      |
03) Filing State... NJ New Jersey       | U = Update Filing     |
04) Status Code.... 03 Complete         | V = Validate Filing   |
05) Prepared By....                    | A = Approve Order     |
06) Req Filing Date. 10/10/2006         | G = Get Order Info    |
07) Mailing Date...                    | C = Continuation      |
08) Filing Fee.....                    | T = Termination       |
09) Check Number....                    |
10) Received Date...                    |
11) Filing Date.... 08/02/2011          |
12) Filing Number... 90012142           |
13) Expiration Date. 12/01/2016         |
14) State Of Incorp. NJ New Jersey      |
15) Organization Id.                    |
16) Continuation Dt.                    |
17) Cancelled Date.                    |
18) Cancelled By...                    |
    Order Number... 15318704
20) Report Exempt..
21* Sec Party Name/Addr
22* Opt Filer Ref
23* Filing Changes

Selection █

Ready                               Ln 22, Col 10                               CAP

```

Send Filings – Filing Code U1

Purpose	The <i>Send Filing</i> method can be used to send “New” filings to CSC Financial.
Validations	The following validations are performed before submitting the filing: 1) Order Number must be null. 2) Filing Number and Filing Date must be null.
Results	After processing the request, CSC Financial will return the Order Number, which is then stored and displayed on the UCC record.

Send Filings – Filing Code U3, U8, and U9

Purpose	The <i>Send Filing</i> method can be used to create Amendments and Assignments with CSC Financial.
Validations	The following validations are performed before submitting the filing: 1) Order Number must be null. 2) Filing Number and Filing Date must be populated.
Results	The system will prompt for the type of Amendment: 1) Amend Debtor 2) Amend Secured Party 3) Amend Collateral 4) Assignment

Update Filing – Filing Code U1

Purpose	If any of the fields on the UCC record have been updated, use Update Filing method to update the Order appropriately at CSC Financial.
Validations	The following validations are performed before submitting the filing: 1) Order Number must not be null. 2) Filing Number and Filing Date must be null.
Results	If any validation errors exist, they will be display on screen.

Update Filing – Filing Code U3, U8, or U9

Purpose	If any of the fields on the UCC record have been updated, use Update Filing method to update the Order appropriately at CSC Financial.
Validations	The following validations are performed before submitting the filing: 1) Order Number must not be null. 2) Filing Number and Filing Date must be populated..
Results	The system will prompt for the type of Amendment: 1) Amend Debtor 2) Amend Secured Party 3) Amend Collateral Assignment If any validation errors exist, they will be display on screen.

Validate Filing

Purpose	The Validate Filing method should be used to validate the Order Number with CSC Financial. If there are no serious validation messages, the order can be approved.
Validations	The following validations are performed before submitting the filing: 1) Order Number must not be null. 2) Secured Party Address information must be populated.
Results	If any validation errors exist, they will be display on screen.

Approve Order

Purpose	Approving an Order will instruct CSC Financial to send out for processing using the Approve Order method.
Validations	The following validations are performed before submitting the filing: 1) Order Number must not be null.
Results	If any validation errors exist, they will be display on screen.

Get Order Information

Purpose	At any time, the Get Order Information method can be used to check on the status of their order. This method will also download and store all PDF attachments when prompted.
Validations	Order Number must not be null.
Results	If any validation errors exist, they will be display on screen.

Continuation

Purpose	This method allows you to file a continuation to an existing filing that is in the system. If the record type is not U8, the integration will make a copy of this UCC record as U8.
Validations	The Filing Data and Number must be populated.
Results	If any validation errors exist, they will be display on screen.

Termination

Purpose	This method allows you to file a termination to an existing filing that is in the system. If the record type is not U8, the integration will make a copy of this UCC record as U9.
Validations	The Filing Data and Number must be populated.
Results	If any validation errors exist, they will be display on screen.

Administration and Logging

The integration can be configured to capture different levels of communication between InfoLease and CSC Financial based upon the Log Level on the Parameter screen.

Web Service Logging

If the Log Level is non-zero, the integration will log web service activity in the respective log file (*.log) within the database.

CSC Financial Activity	Log File Name
Submit Filing	CreateFiling.log
Update Filing	UpdateFiling.log
Validate Filing	ValidateFiling.log
Approve Order	ApproveFiling.log
Get Order Information	GetOrderInfo.log GetAttachment.log
File Continuation	ContinueFiling.log
File Termination	TerminateFiling.log

For example, if the InfoLease database name is "DATABASE", the *CreateFiling.log* file would be found in `/info/DATABASE/CreateFiling.log`.

The level of detail captured in these log files is driven by the log level configured. UniData defines the log levels as follows:

Log Level	Log Level Action
0	No logging.
1	Socket open/read/write/close action (no real data) HTTP request: host info(URL)
2	Level 1 logging plus socket data statistics (size, and so forth).
3	Level 2 logging plus all data actually transferred.
4-10	More detailed status data to assist debugging.

Transaction XML Logging

Additionally, if the log level is greater than "6", the integration will capture all "Request" and "Response" *.xml documents for specific transactions in the TCI.CSC.LOG directory. For example, after completing a "Get Order Information" request, the following files could be found:

```
/info/DATABASE/TCI.CSC.LOG/GetOrderInfo_15304788_request.xml  
/info/DATABASE/TCI.CSC.LOG/GetOrderInfo_15304788_response.xml
```

Note: Operating System level access may be required to view these log files.

Troubleshooting

CSC Message	InfoLease Solution
Debtor 1's Organization Jurisdiction is required for Business types.	The State of Incorporation has not been populated. Update #14 State of Incorporation on the UCC record. Additionally, you may wish to populate the State of Incorporation under the "UCC Defaults" in Customer Maintenance. See Customer Maintenance → Default Data → Addl Default Data → UCC Defaults.
You must supply at least one secured party.	Check that the Lessor Secured Party defaults have been populated for the contract Lessor. See Lessor Parameter Maintenance → Default Fields → Sec Party Name/Addr. Additionally, you can override the Lessor Secured Party defaults by populated the Secured Party window on the UCC record.