



Developer's Guide: Importing Lease Data

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Overview

The Click & Lease program includes an interface for importing lease data from your Web-enabled property management software, allowing you to edit lease data within the Click & Lease interface, save the lease record, and print any of the official forms available in the Click & Lease program. The interface also offers you the flexibility to bypass the Click & Lease editor altogether and generate a printable PDF file directly.

This document describes how to format your data for import as well as the mechanism for transferring it into the Click & Lease program.

XML and the Blue Moon DTD

In order to import data into the Click & Lease program, you must first encapsulate it in XML (eXtensible Markup Language) format. XML is a data format for structured document interchange on the Web. It is a standard defined by The World Wide Web consortium (W3C). Information about XML and related technologies can be found at <http://www.w3.org/XML>.

The XML data you pass must adhere to the appropriate Blue Moon Document Type Definition (DTD), which can be found at <http://www.bluemoonforms.com/?p=resources/developers> (please refer to the DTD designated for your product). The Blue Moon DTD specifies attributes for maximum field length as well as the expected format for data elements. If your data does not adhere to the specifications set out in the DTD, the import process will terminate and display an error message.

NOTE:

You will likely be passing a subset of the entire data set defined in the Blue Moon DTD when importing into the Click & Lease program.

Login Data

The first component of the information you pass to the Click & Lease program is the login data. In order to establish a secure connection to the Click & Lease program, you must pass your License (Serial) Number, User ID, and password.

Login data takes the following format:

```
<LOGIN>
  <SERIAL-NUMBER>MySerial</SERIAL-NUMBER>
  <USER-ID>MyUserID</USER-ID>
  <PASSWORD>MyPassword</PASSWORD>
</LOGIN>
```

NOTE:

The login data elements above are encapsulated by <LOGIN> tags. You must substitute your own login data (Serial #, User ID, and password) for each of the login elements. Failure to include ALL of the above fields will result in termination of the import process.

Lease Data

Lease data refers to the information that will populate the lease record you are importing into the Click & Lease program. Lease data is encapsulated by the parent element set `<LEASE>` (see *Example: XML Data Set* later in this document) and is broken down into two groups: `<STANDARD>` fields and `<CUSTOM>` fields. The latter contains optional field elements for management company-specific custom forms, which are not discussed in this document (contact *Blue Moon Software Sales* for more information about the custom forms process).

Unlike login data, you can choose which combination of lease data elements you want to pass to the Click & Lease program. In most cases, you will only pass a small subset of the available lease elements – specifically, those which do not automatically populate from the default lease settings. These include the unit, resident/tenant(s), beginning lease date, etc. All fields which appear on the standard Click & Lease forms are grouped under the `<STANDARD>` element subset as shown in the example below.

Example: Lease Data Set

```
<STANDARD>
  <UNIT-NUMBER>100XML</UNIT-NUMBER>
  <RESIDENT-1>Bob Smith</RESIDENT-1>
  <LEASE-BEGIN-DATE>01/01/2015</LEASE-BEGIN-DATE>
  .
  .
</STANDARD>
```

Passing XML Lease Data to the Click & Lease Program

There are many ways to exchange XML data on the Web. The Click & Lease interface accepts XML data via a secure HTTP POST-method form submission. Blue Moon provides links to simple form templates for sending lease data at <http://www.bluemoonforms.com/?p=resources/developers/importleasedata>.

Note the following requirements:

- For properties using the TAA or NAA lease, the form POST action must be:
https://www.bluemoonforms.com/products/forms_online/import_xml.php
- For properties using the GAA lease, the form POST action must be:
https://www.bluemoonforms.com/products/forms_online/import_xml.php?ver=GAA
- For properties using the AANC lease, the form POST action must be:
https://www.bluemoonforms.com/products/forms_online/import_xml.php?ver=AANC
- For facilities using the TSSA lease, the form POST action must be:
https://www.bluemoonforms.com/products/forms_online/import_xml.php?ver=TSSA
- The field containing your XML data must be named IMPORTXML (this name is case-sensitive).
- You may not include a custom DTD in your XML string. The Blue Moon DTD will be transparently pre-pended to your XML string and used to validate your data.
- You must “escape” quotes as necessary within your data to prevent premature termination of the IMPORTXML field’s value statement.
- You must pass all necessary login data elements.

- The Blue Moon DTD defines data types for many fields. Field elements which do not have a type explicitly defined in the DTD are implied to expect generic string character data. The various data types contained in the Blue Moon DTD are:

Data Type	Description	Valid Examples
<code>boolean</code>	Expects TRUE/FALSE value (used with field elements corresponding to non-exclusive checkboxes)	TRUE FALSE true False T f
<code>currency</code>	Dollar value	500.00 500 (cents omitted)
<code>date</code>	Full date	01/05/2015 1/5/15 (leading zeros omitted) 1-5-15 (dashes as separator)
<code>day</code>	Day of the month	Any integer value between 1 and 31
<code>email</code>	E-mail address	johnq@ma il .c om
<code>enum</code>	Integer value (corresponds to position of selected item in a group of mutually-exclusive checkboxes)	Unit comes: <input type="checkbox"/> Unfurnished <input type="checkbox"/> Furnished 1 (first item checked) 2 (second item checked)
<code>integer</code>	Numeric value (no decimals)	Any integer value
<code>multichoice</code>	Letter selected from multiple-choice form item (range of valid responses limited by range attribute)	range=2: a or b range=3: a, b, or c range=4: a, b, c, or d
<code>percent</code>	Numeric value up to 100 (no decimals)	Any integer value between 1 and 100
<code>phone</code>	Phone number	(512) 322-0460 (512)322-0460 512-322-0460 5123220460
<code>zip</code>	Zip code	78701 78701-4125 (zip + 4-digit code)

If the format of any of your lease data values is inconsistent with the data types defined in the Blue Moon DTD, the import process will be terminated.

The Property Number

Most Click & Lease licenses are configured with only one property (or site). In a few instances, some licenses may contain multiple properties.

Because each property is assigned its own lease database, distinct from any other properties which may be assigned to the same license, it becomes necessary when passing lease data to multi-property licenses to specify explicitly the unique ID, or Property Number, of the target property.

The Property Number can be supplied by means of the <PROPERTY-NUMBER> element.

If the target license contains a single property, as most do, you do NOT need to provide a Property Number in such cases. This is because the target property is implicitly assumed to take the first and only Property Number on file for the license.

If you choose NOT to include the Property Number in your data set AND the license corresponding to the provided Serial Number contains more than one property, the client will be redirected to a screen prompting the user to select the target property from a pull-down menu (this is not the case when you are requesting a PDF document directly (see end of section labeled *Generating a Printable PDF Directly* for more info). Once a selection has been made, the user is then redirected to the Click & Lease editor.

If you wish to bypass this property selection feature and provide a seamless transition to the Click & Lease interface, you must pass the Property Number of the target property, as shown in the following example.

Example: Specifying the Property Number

```
<STANDARD>
  <PROPERTY-NUMBER>XXXX</PROPERTY-NUMBER>
  .
  .
</STANDARD>
```

Passing an invalid value for <PROPERTY-NUMBER> will result in termination of the import process.

About Default Lease Data

Most of the items that appear on the printed *Lease Contract* can be pre-filled with values from the Click & Lease default lease settings. This feature eliminates the need to pass values that do not often change from one lease contract to the next. You can, however, override values from the default lease settings with custom values of your own by explicitly passing values for those field elements.

Example 1: Overriding Default Lease Settings

```
<STANDARD>
  <RELETTING-CHARGE>250.00</RELETTING-CHARGE>
  <RETURNED-CHECK-CHARGE>25.00</RETURNED-CHECK-CHARGE>
</STANDARD>
```

In certain instances, you may wish for a specific field to be left blank, even though the default lease settings contain a value for that field. This can be accomplished by passing an “empty tag” for the field element in question, which can take the form <FIELD-NAME></FIELD-NAME> OR <FIELD-NAME/>.

Example 2: Overriding Default Lease Settings with Empty Values

```
<STANDARD>
  <RELETTING-CHARGE/>
  <RETURNED-CHECK-CHARGE/>
</STANDARD>
```

For a complete listing of fields available in your Click & Lease program, refer to the Blue Moon DTD designated for your specific product (TAA, NAA, GAA, AANC, or TSSA).

Generating a Printable PDF Directly

As mentioned earlier in this document, it is possible to bypass the Click & Lease editor altogether and generate a printable PDF directly. This can be accomplished by including the IDs of the forms you wish to print encapsulated in <PRINT> element tags. The record will be saved to your Click & Lease program, and your clicks counter will be reduced by the total number of clicks assessed for the forms to be printed.

A list of forms available for the TAA & NAA Click & Lease products, along with their respective IDs and print charges, can be found at http://www.bluemoonforms.com/developers/matrix_forms.php.

The following example shows how to bypass the Click & Lease editor by including form IDs.

Example: Passing IDs of Forms to Print

```
<LEASE>
  <PRINT>APtlease</PRINT>
  <PRINT>LEADHAZD</PRINT>
  <PRINT>PETAGREE</PRINT>
  <STANDARD>
  <UNIT-NUMBER>100XML</UNIT-NUMBER>
  .
  .
  </STANDARD>
</LEASE>
```

You must also include the Property Number of the target property if you are requesting the PDF document from a license containing more than one property. If no Property Number is provided, then the new record will be implicitly added to the lease database of the first property listed in the system for the specified license.

Putting it all Together

Now that you understand the function and syntax of each data subset, let's construct an example combining all of the XML subsets.

Example: XML Data Set

```
<BLUEMOON>
  <LOGIN>
    <SERIAL-NUMBER>MySerial</SERIAL-NUMBER>
    <USER-ID>MyUserID</USER-ID>
    <PASSWORD>MyPassword</PASSWORD>
  </LOGIN>
  <LEASE>
    <STANDARD>
      <UNIT-NUMBER>100XML</UNIT-NUMBER>
      <RESIDENT-1>Bob Smith</RESIDENT-1>
      <LEASE-BEGIN-DATE>01/01/2015</LEASE-BEGIN-DATE>
      <RELETING-CHARGE>250.00</RELETING-CHARGE>
      <RETURNED-CHECK-CHARGE/>
    </STANDARD>
  </LEASE>
</BLUEMOON>
```

An example demonstrating how to transmit XML data to the Click & Lease program via an HTTP from submission can be viewed at <http://www.bluemoonforms.com/?p=resources/developers/importleasedata>.