insightsoftware

Application Programming Interface (API) Developer's Guide

LeaseAccelerator

Version 26.2

Document Information

Notices

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This guide is designed to help you to use the LeaseAccelerator applications effectively and efficiently. All data shown in graphics are provided as examples only. The example companies and calculations herein are fictitious. No association with any real company or organization is intended or should be inferred.

Contents

Application Programming Interface (API) for Developers

Overview

The LeaseAccelerator API combines the simplicity of REST requests with the robust data exchange capabilities of XML Remote Procedure Calls (RPC). Each request is stateless and multiple method requests can be submitted concurrently from the same secure session.

Access is secured by SAML2, allowing for instantiation of a secure session that can then be used for multiple requests. To support this secure access, you must be integrated with LeaseAccelerator's Single Sign-On (SSO) solution. Assuming you already have a SAML2-compliant identity provider configured, this is generally a simple matter of exchanging SAML2 Metadata, consisting of certificate and configuration information. For more information on SAML2, see the OASIS standards at http://saml.xml.org/saml-specifications.

Authentication

Before you can submit API requests, you must first authenticate through LeaseAccelerator's SAML2 authentication layer. Assuming your identity provider supports Enhanced Client or Proxy (ECP) mode, this is a straightforward process:

1. You will need the URL for your identity provider (IdP).
2. You will need appropriate login credentials for a user who has already been federated for access in LeaseAccelerator.
3. You will need the URL for the LeaseAccelerator authentication service provider (SP): https://environment.leaseaccelerator.com/auth/api
4. Submit a SAML2 GET request to the SP URL, identifying the IdP and the credentials you wish to use.
5. Extract the response, which will take the form of a text security token.

If you are using Java, you may find the shib-http-client project (https://github.com/DARIAH-DE/shib-http-client) useful. The source for a complete Java test client using this library is provided as an appendix to this document. The key fragment implementing the last two steps above is as follows:

```
        HttpClient client= new ShibHttpClient(idpBaseUrl +
"/idp/profile/SAML2/SOAP/ECP", userName, password);
        HttpGet req = new HttpGet(spUrl + "/auth/api");
        HttpResponse res = client.execute(req);
        InputStream ins = res.getEntity().getContent();
        BufferedReader br = new BufferedReader(new InputStreamReader(ins));
        String token = br.readLine();
```

Structure

URL

Once you have authenticated, and have a valid session, you can submit POST requests using the URL form:

https://environment.leaseaccelerator.com/lease_accelerator/api/LeaseAccelerator/operation

- environment is the LeaseAccelerator environment you are accessing (e.g.,www for production). If posting to a different environment, please contact LeaseAccelerator Support for the appropriate URL.
- operation is the operation key for the method you are invoking.

Each POST request must include two fields:

- token is the security token you received upon successful authentication.
- file is an APIRequest tag; see the Request section immediately following for more details.

For the AttachFile operation, there is a third field which is required:

- filetoattach is the actual file (e.g., PDF) to be attached.

The response to your POST request will be an APIResponse tag; see the Response section for more details.

Request

The generic structure of a LeaseAccelerator API request is:

```
<APIRequest>
	<Request>
		<RequestId>requestId</RequestId>
		<WarningPolicy>warningPolicy</WarningPolicy>
		<ErrorPolicy>errorPolicy</ErrorPolicy>
	</Request>
	<Payload>operationSpecificRequest</Payload>
</APIRequest>
```

RequestID	Text	The unique identifier you specified in the request.
requestId	Text	A unique identifier that you use to track the request. It will be included in the response to your request, whether successful or not.

RequestID	Text	The unique identifier you specified in the request.
warningPolicy	Stop Skip Ignore	Dictates how LeaseAccelerator should behave if a warning is encountered in processing the request. Stop means that all processing should stop immediately, and any actions performed so far for this request should be rolled back. Ignore means that processing should continue, ignoring any and all warnings that may be reported. The warnings will still be reported back as part of the APIResponse, but processing will continue nonetheless. Skip means that, for multi-record requests, the record that triggered the warning should be skipped, but all other records should still be processed normally. (For requests that accept only one record in the Payload, Skip is not supported.) For example, when doing a bulk import, a warning is raised if no Asset User is specified for an asset. With a warningPolicy of Stop, the import would fail, with neither deals nor assets imported. With a warningPolicy of Ignore, all deals would be imported, albeit some without an Asset User. With a warningPolicy of Skip, all deals would be imported except for those containing an asset for which no Asset User was specified. In all three cases, the APIResponse would detail which deals include assets that have no Asset User specified. The default warningPolicy is Ignore.
errorPolicy	Stop Skip	Dictates how LeaseAccelerator should behave if an error is encountered in processing the request. Stop means that all processing should stop immediately, and any actions performed so far for this request should be rolled back. Skip means that, for multi-record requests, the record that triggered the error should be skipped, but all other records should still be processed normally. (For requests that accept only one record in the Payload, Skip is not supported.) For example, when doing a bulk import, an error is raised if an invalid product category is specified for an asset. With an errorPolicy of Stop, the import would fail, with neither deal nor assets imported. With an errorPolicy of Skip, all deals would be imported except for those for which an invalid product category was specified for an asset. In both cases, the APIResponse would identify each invalid product category specified. The default errorPolicy is Stop.
operationSpecificRequest	XML	The XML request payload specific to the method being invoked. See the Methods section below for details on each method's specific request payload requirements.

Response

The generic structure of a LeaseAccelerator API response is:

```
<APIResponse>
    <Response>
        <RequestId>requestId</RequestId>
        <Status>requestStatusCode</RequestStatus>
        <Context>requestStatusDetails</RequestContext>
    <Response>
    <Payload>operationSpecificResponse</Payload>
</APIResponse>
```

requestId	Text	The unique identifier you specified in the request.
requestStatusCode	Integer	A code indicating success or failure. Zero (0) always means success. Any other value represents an error.
requestStatusDetails	Text	A description of the overall request results. Ok always means success. Any other value is a description of the error encountered.
operationSpecificResponse	XML	The response payload specific to the method being invoked. See the Methods section below for details on each method's specific response payload.

API Methods

For each method, the Operation key is provided, along with the Payload structure for the Request and Response messages. Data elements referenced in the Payload explanations are also detailed in the Ontology section.

Add/Update Address

Operation: AddUpdateAddress

This method may be used to update existing addresses and/or to add new addresses.

Addresses are specific workplaces in your organization where employees work and/or equipment may be physically located or shipped to. This would also include the physical location of any leased Real Estate. They are typically associated with a Lessee, Entity, or Business Unit. (There may be a 1: n relationship because companies may have multiple teams “sitting” at a single location.)

```
Request:    <Payload>
              <AddressInfo>
                    <CompanyId>companyId</CompanyId>
                    <UpdateDealStatus>updateDealStatus</UpdateDealStatus>
                    <ImportKey>importKey</ImportKey>
                    <ImportedFrom>importSource</ImportedFrom>
                    <Company>companyName</Company>
                    <AddressId>addressId</AddressId>
                    <Address1>addressLine1</Address1>
                    <Address2>addressLine2</Address2>
                    <City>city</City>
                    <Country>country</Country>
                    <Roles>addressRoleType<Roles>
                    <PostalCode>postalCode</PostalCode>
                    <Latitude>latitude</Latitude>
                    <Longitude>longitude</Longitude>
                    <StateProvinceShort>stateProvinceShort
</StateProvinceShort>
                    <StateProvinceLong>stateProvinceLong</StateProvinceLong>
                    <AncillaryFields>
                          <AncillaryField>
                                <Attribute>attribute</Attribute>
                                <Value>attributeValue</Value>
                          </AncillaryField>
```

```
                    …
                </AncillaryFields>
            </AddressInfo>
            …
        </Payload>
```

For each address being added or updated, you can specify an AddressInfo element with the following attributes:

Attribute	Type	Description
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company with which the address is associated.
updateDealStatus	None PreOrigination Active Renewed Evergreen Terminated Disposed All	None, All, or a comma-separated list of states of deals to which changes should be applied where the address being updated is already associated with deals in the specified state. If None, the change will be limited to future deals; if All, the change will be retroactively applied to all deals in which the address is a participant.
importKey	Text	Specifies an external identifier by which the address may be recognized. Note that if addressId is not specified but importKey is, LeaseAccelerator will attempt to look up the importKey to see if this is a known address and, if so, will update the corresponding address. This enables external systems to perform adds and updates using their own identifiers to reference the address.
importSource	Text	Specifies a name for the external source associated with the importKey. This name is limited to 32 characters in length.
companyName	Alphanumeric (150)	Employee's Entity or Business Unit (typically governed by your company's internal method to commonly reference the organization that an employee is part of). Must exactly match a value on Companies Tab where Company Role Type = Lessee, Entity, Funder, Vendor, or SBU.
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location. If specified, the address will be updated; if not specified (and if the address cannot be resolved using importKey), a new address will be created.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.

Attribute	Type	Description
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
addressRoleType	ShipTo	The function that this location plays within your leasing program.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
latitude	Numeric 0 - 90	The latitude, in degrees of the address, where positive is in the Northern Hemisphere, negative the Southern.
longitude	Numeric 0 -180	The longitude, in degress of the address.
stateProvinceShort	See Country Province List	Postal abbreviation for acceptable Countries in short form.
stateProvinceLong	See Country Province List	Postal abbreviation for acceptable Countries in long form.
attribute	Alphanumeric (32)	Name of attribute associated with the company that will be persisted. Custom attribute types can be configured as needed.
attributeValue	Alphanumeric (32)	The code or “value” per Chart of Accounts or accounting system associated with the participant company, if appropriate. Or value associated with custom attribute type.

```
Response:    <Payload>
                    <Contacts>
                          <Contact>
                                <CompanyId>companyId</CompanyId>
                                <Company>companyName</Company>
                                <Email>email</Email>
                                <AddressId>addressId</AddressId>
                                <Address1>addressLine1</Address1>
                                <Address2>addressLine2</Address2>
                                <Phone>phone</Phone>
                                <City>city</City>
                                <Country>country</Country>
                                <PostalCode>postalCode</PostalCode>
                                <PartyId>partyId</PartyId>
                                <FullName>partyName</FullName>
                                <ContactType>companyRoleType</ContactType>
                                <Url>URL</Url>
```

```
                                    <Title>title</Title>
                                    <PostalCode>postalCode</PostalCode>
                                    <StateProvince>stateProvince
</StateProvince>
                                    <AncillaryFields>
                                          <AncillaryField>
                                                <Attribute>attribute
</Attribute>
                                                <Value>attributeValue</Value>
                                          </AncillaryField>
                                    </AncillaryFields>
                              </Contact>
                              ...
                        </Contacts>
                  </Payload>
```

For each company successfully added or updated from the request, a Contact tag is populated with the following information:

Information	Type	Description
companyID	Integer	The unique company ID used by LeaseAccelerator to identify the company.
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location at the specified company in the context of the specified contactTypes.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
phone	Numeric (32)	Telephone number
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.

Information	Type	Description
partyId	Integer	The unique party ID used by LeaseAccelerator to identify the person portion of this participant.
fullName	Alphanumeric (150)	First name Last name
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions
url	Alphanumeric (512)	Website Address - Must be in standard format
title	Alphanumeric (150)	Title
postalCode	Alphanumeric (16)	The postal/zip code of the address.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
attribute	Alphanumeric (100)	Name of attribute associated with API Method. Custom attribute types can be configured as needed.
attributeValue	Alphanumeric (100)	The “value” used by your accounting system to identify the work location. Typically, this is one of many portions of an overall General Ledger string or value associated with custom attribute type.

Add/Update Artifact with Line Items

Operation: AddUpdateArtifact

This method may be used to update existing documents, add new documents to an existing deal, or create a new deal from a new document. Note that, while this method can be used to add or update multiple artifacts at once, at least two invocations will be needed to create a new deal containing multiple documents. (The first invocation will assign the dealId for the new deal, which can then be used in the subsequent invocation(s).)

```
Request:    <Payload>
              <Artifact>
                    <DetailLevel>detailLevel</DetailLevel>
                    <DealId>dealId</DealId>
                    <ArtifactId>artifactId</ArtifactId>
                    <ArtifactType>artifactType</ArtifactType>
                    <Rename>renameFlag</Rename>
                    <ArtifactNumber>artifactNumber</ArtifactNumber>
                    <Comments>comments</Comments>
                    <Currency>currency</Currency>
                    <CreationDate>creationDate</CreationDate>
```

```
                    <DateRendered>dateReceived</DateRendered>
                    <RenderingType>renderingType</RenderingType>
                    <BU>bu</BU>
                    <Lessee>lessee</Lessee>
                    <Entity>entity</Entity>
                    <Geo>geo</Geo>
                    <Funder>funder</Funder>
                    <Vendor>vendor</Vendor>
                    <LineItems>
                          <LineItem>
                                <ProductCategory>productCategory
</ProductCategory>
                                <ExternalId>externalId</ExternalId>
                                <ProductNumber>productNumber
</ProductNumber>
                                <Manufacturer>manufacturer</Manufacturer>
                                <Description>description</Description>
                                <CostCenter>costCenter</CostCenter>
                                <Quantity>quantity</Quantity>
                                <UnitPrice>unitPrice</UnitPrice>
                                <ObservablePrice>observablePrice
</ObservablePrice>
                                <UnitRent>unitRent</UnitRent>
                                <SerialNumber>serialNumber</SerialNumber>
                                <AssetTag>assetTag</AssetTag>
                                <Comments>Comments</Comments>
                                <AssetOwner>assetOwner</AssetOwner>
                                <CommonName>commonName</CommonName>
                                <FullyQualifiedName>fqn
</FullyQualifiedName>
                                <Units>units</Units>
                                <TotalSpace>totalSpace</TotalSpace>
                                <UsableSpace>usableSpace</UsableSpace>
                                <RentableSpace>rentableSpace
</RentableSpace>
                                <UtilityPricing>utilityPricing
</UtilityPricing>
```

```
                                    <UtilityPricingBasis>utilityPricingBasis
</UtilityPricingBasis>
                                    <State>serviceState</State>
                                    <Contacts>
                                          <Contact>
                                                <FullName>fullName</FullName>
                                                <ContactType>personRoleType
</ContactType>
                                                <Company>companyName</Company>
                                                <Address1>addressLine1
</Address1>
                                                <Address2>addressLine2
</Address2>
                                                <City>city</City>
                                                <StateProvince>stateProvince
</StateProvince>
                                                <Country>country</Country>
                                                <PostalCode>postalCode
</PostalCode>
                                          </Contact>
                                          ...
                                    </Contacts>
                              </LineItem>
                              …
                        </LineItems>
                        <Contacts>
                              <Contact>
                                    <FullName>fullName</FullName>
                                    <ContactType>personRoleType</ContactType>
                                    <Company>companyName</Company>
                                    <Address1>addressLine1</Address1>
                                    <Address2>addressLine2</Address2>
                                    <City>city</City>
                                    <StateProvince>stateProvince
</StateProvince>
                                    <Country>country</Country>
                                    <PostalCode>postalCode</PostalCode>
                              </Contact>
```

```
                        ...
                    </Contacts>
                    <Terms>
                        <LeaseType>leaseType</LeaseType>
                        <Duration>duration</Duration>
                        <PaymentFrequency>paymentFrequency
</PaymentFrequency>
                        <RepaymentMode>repaymentMode</RepaymentMode>
                        <PaymentBasis>paymentBasis</PaymentBasis>
                        <Fiir>interestRate</Fiir>
                        <DownPayment>downPayment</DownPayment>
                    </Terms>
            </Artifact>
            …
        </Payload>
```

For each document to be added or updated, the payload should include an Artifact tag populated with the following information:

Information	Type	Description
detailLevel	Asset LineItem None	If LineItems are provided for the artifact (see below), detailLevel specifies the level of granularity for the line items. Asset-level granularity means that all items will be elaborated as quantity 1 and may include asset-level details such as serialNumber, assetTag, and assetComments; whereas LineItem-level granularity allows for quantities greater than 1, but does not support asset-level details. Typically, LineItem granularity is used until the contract is finalized, at which point Asset-level detail becomes relevant. If detailLevel is not specified but LineItems are provided, the default granularity is LineItem. None may be used if LineItems are not being provided.
dealId	Integer	If provided, specifies the unique transaction ID used by LeaseAccelerator to identify the deal to which the artifact should be added. If both dealId and artifactId are omitted, a new deal will be created, containing only the new document.
artifactId	Integer	If provided, specifies the unique artifact ID used by LeaseAccelerator to identify the document being updated. If omitted, a new artifact will be created, either in a new deal or in an existing deal as specified by dealId.
artifactType	See list below	The type of document being added/updated.
renameFlag	Y/N	Specify 'Y' if you want to rename the current artifact specified by dealId and artifactType, 'N' if you want to create a new artifact.

Information	Type	Description
artifactNumber	Text	The identifying number associated with the document being added/updated. Note that if neither artifactId nor artifactNumber is specified in the request, the artifactNumber will be automatically assigned by the system.
comments	Alphanumeric (250)	Any related comments to be captured in LA
currency	See Currency list	The currency used to value the line items on the artifact being added/updated.
creationDate	Date (MM/DD/YYYY)	The creation date of the document being added/updated. If creationDate is not specified in the request, it will be populated with the current date when the API request is processed.
dateReceived	Date (MM/DD/YYYY)	The date of receipt of the document being added/updated. If dateReceived is not specified in the request, it will be populated with the current date when the API request is processed.
renderingType	Amalgam, Executed, Original, PartiallyExecuted, Substitute, Unknown	Document Status/Workflow state of document
bu	Alphanumeric (150)	Operational group within customer organization primarily used for management reporting. (Known on CIW as SBU.) Must exactly match value from Companies Tab where Company Role Type = SBU.
lessee	Alphanumeric (150)	The legal party to the agreement leasing the equipment or renting the real estate. Real estate leases may refer to this as the Tenant. Must exactly match a Lessee listed on the Companies Tab with the Company Role Type = Lessee.
entity	Alphanumeric (150)	Primary business entity which should match one of the entities listed on Companies Tab. Must exactly match value from Companies Tab where Company Role Type = Entity.
geo	See Country List	Country Name that governs the accounting and tax rules for a transaction.
funder	Alphanumeric (150)	Also referred to as Lessor, they provide the cash to finance the equipment purchase through a lease agreement. Real Estate leases may refer to this as the Landlord. Must exactly match a Lessee listed on the Companies Tab with the Company Role Type = Funder.
vendor	Alphanumeric (150)	A company providing a service related to the leased asset. Often used for providers of IDCs, Lease Incentives, or other real estate expenses such as insurance. Must exactly match value on Companies Tab where Company Role Type = Vendor.

For each document added/updated, you may also provide line-item details. Line-item details provided when updating an existing document will supersede any existing line-item information associated with the document. For each line item, you can specify:

Information	Type	Description
productcategory	See Product Category list	Grouping of Assets by type
externalId	Alphanumeric (64)	Used to identify parent/child relationships (if any) for a group of assets.
productNumber	Alphanumeric (64)	A unique identifier for equipment typically used to delineate the type of equipment in the manufacturer's product catalogue.
manufacturer	Alpha (200)	Company Name. This field may be used to identify the Real Estate Developer for a real estate lease.
description	Alphanumeric (1024)	Description of equipment or real estate which may include model year, make, lot number, parcel number, and other descriptors.
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.
quantity	Numeric (Total = 18, Precision = 2)	Number of units. Must be >0; If blank, system assumes 1.
unitPrice	Numeric (Total = 18, Precision = 2)	Original equipment cost per unit in local currency. Must be >0.
observablePrice	Numeric (Total = 18, Precision = 2)	The price at which the Lessee would purchase the lease or non-lease component separately. The relative percent for each component is used to allocate the total consideration of lease payments to each component for accounting purposes. If the observable standalone prices are not readily available, the Lessee shall estimate the standalone prices, maximizing the use of observable information. If observable price is entered for one asset, it should be entered for all assets, even if the observable price is the same as the unit price. The accounting standards prescribe the use of the SOP. This field should be entered if the explicit SOP or an estimate is used. However, LeaseAccelerator does not REQUIRE the field since the system has default rules-based estimates. Must be > 0
unitRent	Numeric (Total = 18, Precision = 2)	A specific rental or payment amount defined in the lease agreement for the specific asset or lease component. If the standalone observable price is not provided, this amount will be used as the estimate for allocating the total payments to each individual component and/or asset (if provided). If unit rent is specified for one asset, it must be specified for all assets on schedule. The accounting standards prescribe the use of the SOP.
serialNumber	Alphanumeric (64)	Unique identifier for each asset

Information	Type	Description
assetTag	Alphanumeric (64)	A field available to customers to group assets. Typically, the asset tag assigned by your physical asset management (PAM) or IT asset management (ITAM) team and. This may serve as a linking ID for reference to an external PAM or ITAM ssystem. This attribute is not used by LeaseAccelerator beyond reporting, andreporting and may be repurposed.
Comments	Alphanumeric (2500)	Free form field for user comments
assetOwner	Alphanumeric (150)	Name or employee responsible from organization/fiduciary perspective. Must exactly match value on People Tab where People Role Type = Asset Owner.
commonName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
fqn	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
units	Square Feet, Square Meters, Acres	The unit of measure for area (currently used for real estate leases). Required if payments are utility-based calculations (versus a specified amount).
totalSpace	Numeric (10)	The amount of total space leased. Required if payments are utility-based calculations (versus a specified amount). Required only if utilityPricingBasis is Total.
usableSpace	Numeric (10)	The amount of space that can be used in the leased premises, generally measured from wall to wall. Required only if utilityPricingBasis is Usable.
rentableSpace	Numeric (10)	Refers to the usable space, plus a proportional share of common areas of the building, such as the main lobby, elevator lobbies and hallways, and bathrooms that are outside a tenant's leased space and available for use by other tenants, etc. Required only if utilityPricingBasis is Rentable.
utilityPricing	Numeric (Total = 18, Precision = 2)	Price Per Utilized Unit - Rate used to determine rental payment. Required if Utility Based payment; Amount >0. For example, $100/square foot for 1000 square feet of usable space, utilityPricing would be 100, units would be Square Feet and usableSpace would be 1000 and utilityPricingBasis would be Usable.
utilityPricingBasis	Total, Usable, Rentable	The type of space factor used to identify the quantity of space rented. Required if Utility based pricing.
serviceState	Alphanumeric (128)	A description field often used by customers to define the work state of an asset. Examples may include: Out for Repair, Under Construction, In Service. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.

For each document added/updated or for each line-item detail added/updated, a Contact information can be attached. For each contact, you can specify:

Detail	Type	Description
fullName	Alphanumeric (150)	First name Last name
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.

Information about the financing terms of the transaction may also be included for some ArtifactTypes, e.g., Schedule:

Detail	Type	Description
leaseType	See list (Use Value in PIW column)	Type of contractual agreement.
duration	Numeric (4)	Number of payments between commencement and original end of term. (Examples: 3-year lease paid monthly, Duration is 36. 3-year lease paid quarterly, Duration is 12.) Must be positive number.
paymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	The frequency with which payments will be made. If the lease uses a step payment schedule with multiple payment frequencies, specify Monthly here.
repaymentMode	Advance Arrears	Specifies whether payments will be made at the beginning of the period or at the end of the period.

Detail	Type	Description
paymentBasis	LRF Fixed Floating	Indicates whether the lease pricing is quoted in terms of a Lease Rate Factor (LRF), a Fixed Interest Rate (Fixed), or a Floating Interest Rate (Floating). If the paymentBasis is specified as an LRF, a blendedLrf must be specified. If the paymentBasis is specified as a Fixed rate, the interestRate must be specified, along with an optional residualAmount. If the paymentBasis is specified as a Floating rate, the floatingRateBasis, spreadOverBasis, benchmarkDate, and adjustmentFrequency must all be specified, along with an optional residualAmount.
downPayment	Number	Any amount that must be paid upfront by the lessee and is not included in the net amount financed. Specify without currency formatting.
Fiir	Numeric (Total = 18, Precision = 12) Expressed as a decimal x.xxxxx	Funder Implicit Interest Rate, which is not ordinarily known by the Lessee. Enter as a number (i.e., 5% not 0.05).

```
Response:    <Payload>
            <Transactions>
                <Artifact>
                    <DealId>dealId</DealId>
                    <ArtifactId>artifactId</ArtifactId>
                    <ArtifactType>artifactType</ArtifactType>
                    <ArtifactNumber>artifactNumber</ArtifactNumber>
                    <Comments>comments</Comments>
                    <Currency>currency</Currency>
                    <Value>value</Value>
                    <CreationDate>creationDate</CreationDate>
                    <DateReceived>dateReceived</DateReceived>
                    <Status>artifactStatus</Status>
                </Artifact>
                …
            </Transactions>
        </Payload>
```

For each artifact successfully processed from the request, an Artifact tag is populated with the following information:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify the deal to which the artifact was added/updated.
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the document added/updated.
artifactType	See list	The type of document added/updated.
artifactNumber	Text	The identifying number associated with the document that was added/updated. Note that if neither artifactId nor artifactNumber was specified in the request, the artifactNumber will be automatically assigned by the system.
Comments	Text	The comments provided for the artifact in the request.
Currency	See Currency list	The currency provided for the artifact in the request.
Value	Numeric	The total value of the artifact based on the aggregation of the line items.
creationDate	Date (MM/DD/YYYY)	The creation date of the document being added/updated. If creationDate is not specified in the request, it will be populated with the current date when the API request is processed.
dateReceived	Date (MM/DD/YYYY)	The date of receipt of the document being added/updated. If dateReceived is not specified in the request, it will be populated with the current date when the API request is processed.
artifactStatus	Text	A text description summarizing the status of the document.

Add/Update Company

Operation: AddUpdateCompany

This method may be used to update existing companies and/or to add new companies.

The Companies tab defines those companies that are a part of your leasing program. Each company, however, may perform a different role or function. Examples include:

- Lessees: The legal party to the agreement leasing the equipment or renting the real estate
- Funders: Also referred to as lessors: they provide the cash to finance the equipment purchase through a lease agreement
- Entity: Organization you consider to be the Lessee (may be different than actual Lessee). An Entity must have a functional currency selected.
- Business Units (SBU): An internal reporting group
- Vendors: Various other parties such as the equipment manufacturer or supplier, an assignee, or an organization to whom you pay an initial direct cost to or receive a lease incentive from

```
Request:    <Payload>
       <CompanyInfo>
              <Roles>companyRoleType</Roles>
              <UpdateDealStatus>updateDealStatus</UpdateDealStatus>
              <ImportKey>importKey<</ImportKey>
              <ImportedFrom>importSource</ImportedFrom>
              <CompanyId>companyId</CompanyId>
              <Company>companyName</Company>
              <ParentCompanyId>parentName</ParentCompanyId>
              <PartyId>partyId</PartyId>
              <AddressId>addressId</AddressId>
              <Email>email</Email>
              <FullName>contactName</FullName>
              <AncillaryFields>
                     <AncillaryField>
                            <Attribute>attribute</Attribute>
                            <Value>attributeValue</Value>
                     </AncillaryField>
                     …
              </AncillaryFields>
       </CompanyInfo>
       …
</Payload>
```

For each company being added or updated, you can specify a CompanyInfo element with the following attributes:

Detail	Type	Description
Role	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	A comma-separated list of roles (of type Company) in which this company can participate in transactions:

Detail	Type	Description
updateDealStatus	None PreOrigination Active Renewed Evergreen Terminated Disposed All	None, All, or a comma-separated list of states of deals to which changes should be applied where the company being updated is already associated with deals in the specified state. If None, the change will be limited to future deals; if All, the change will be retroactively applied to all deals in which the company is a participant.
importKey	Text	Specifies an external identifier by which the company may be recognized. Note that if companyId is not specified but importKey is, LeaseAccelerator will attempt to look up the importKey to see if this is a known company and, if so, will update the corresponding company. This enables external systems to perform adds and updates using their own identifiers to reference the company.
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location.
importSource	Text	Specifies a name for the external source associated with the importKey. This name is limited to 32 characters in length.
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company. If specified, the specified company will be updated; if not specified (and if the company cannot be resolved using importKey), a new company will be added.
companyName	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
parentCompanyId	Integer	The unique company ID of the parent company, if this company rolls up to a higher parent. The highest organization within a company's legal structure.
fullName	Alphanumeric (150)	Contact name. First name Last name
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
partyId	Integer	The unique party ID used by LeaseAccelerator to identify a contact person at the specified company in the context of the specified contactTypes.
attribute	Alphanumeric (32)	Name of attribute associated with the company that will be persisted. Custom attribute types can be configured as needed.

Detail	Type	Description
attributeValue	Alphanumeric (32)	The code or “value” per Chart of Accounts or accounting system associated with the participant company, if appropriate. Or value associated with custom attribute type.

```
Response:    <Payload>
       <Contacts
              <Contact>
                     <CompanyId>companyId</CompanyId>
                     <Company>companyName</Company>
                     <Email>email</Email>
                     <AddressId>addressId</AddressId>
                     <Address1>addressLine1</Address1>
                     <Address2>addressLine2</Address2>
                     <Phone>phone</Phone>
                     <City>city</City>
                     <Country>country</Country>
                     <PostalCode>postalCode</PostalCode>
                     <StateProvince>stateProvince</StateProvince>
                     <PartyId>partyId</PartyId>
                     <FullName>partyName</FullName>
                     <ContactType>companyRoleType</ContactType>
                     <Url>URL</Url>
                     <Title>title</Title>
                     <AncillaryFields>
                            <AncillaryField>
                                   <Attribute>attribute</Attribute>
                                   <Value>attributeValue</Value>
                            </AncillaryField>
                            …
                     </AncillaryFields>
              </Contact>
              …
        </Contacts>
</Payload>
```

For each company successfully added or updated from the request, a Contact tag is populated with the following information:

Detail	Type	Description
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company
companyName	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location at the specified company in the context of the specified contactTypes.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
phone	Numeric (32)	Telephone number
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
partyId	Integer	The unique party ID used by LeaseAccelerator to identify the person portion of this participant.
fullName	Alphanumeric (150)	First name Last name
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions
url	Alphanumeric (512)	Website Address - Must be in standard format
title	Alphanumeric (150)	Title
attribute	Alphanumeric (100)	Name of attribute associated with API Method. Custom attribute types can be configured as needed.
attributeValue	Alphanumeric (100)	A valid value for the specified attribute.

Add/Update Cost Centers

Operation: AddUpdateCostCenters

The AddUpdateCostCenters operation is used to add a new costcenter or update an existing costcenter in LeaseAccelerator. The adding of costcenter is similar to the the functionality ImportCostCenters in BulkImport screen using the spreadsheet.

```
Request:    <Payload>
       <CostCenters>
              <CostCenter>
```

```
                    <Name>name</Name>
                    <Description>description</Description>
                    <Retired>retired</Retired>
              <CostCenter>
              …
       </ CostCenters>
</Payload>
```

The Payload for AddUpdateCostCenters request consists of one or more User tags:

Detail	Type	Description
name	Alphanumeric (150)	Name of the costcenter which needs to be added or updated.
description	Alphanumeric (150)	Description of the costcenters which needs to to be added or updated.
retired	Alphanumeric (1)	This is used to retire the existing costcenters. When a new cost center is added, this will be defaulted to 'N'. If an existing costcenter needs to be retired, then this value should be set to 'Y' along with the name of the costcenter that needs to be retired. Retired cost centers are not deleted as they can be used by existing deals but are not valid to be selected for new deals or to change existing assets.

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Add/Update Person

Operation: AddUpdatePerson

This method may be used to update existing people and/or to add new people.

Many people participate in your leasing program and have different roles. These people may or may not be users of the system. LeaseAccelerator captures these people so that they can receive notifications or other information important to their function. Examples of the roles that people may play and therefore need to be configured in the system are:

- Asset Owners: Employees who have fiduciary responsibility for the maintenance and use of the assets. These employees are typically management level and are financially responsible for the equipment.

- Asset Users: Employees who have custodial responsibility for the leased assets. These employees may be management or staff level. These employees' work locations are typically at the equipment's physical location or in the same area.

- Order Administrators: Employees who have "procurement" responsibility for the leased assets, shepherding the administrative process in your organization to finance the acquisition of equipment and securing its delivery to the asset user.

- Analysts: Employees responsible for generating the Lease vs. Buy.

- Finance Approvers: Employees typically responsible for approving the lease transaction and may be the responsible party signing the lease documents. These employees are typically management or executive level and are an escalation step for notifications regarding End-of-Term.

- Sourcing contacts: Employees responsible for initiating and creating an RFP, reviewing the Proposals and awarding to a Funder/Lessor.

```
Request:    <Payload>
              <PersonInfo>
                    <Roles>personRoleType</Roles>
                    <UpdateDealStatus>updateDealStatus</UpdateDealStatus>
                    <ImportKey>importKey</ImportKey>
                    <ImportedFrom>importSource</ImportedFrom>
                    <CompanyId>companyId</CompanyId>
                    <Company>companyname</Company>
                    <PartyId>partyId</PartyId>
                    <FullName>fullName</FullName>
                    <Email>email</Email>
                    <AddressId>addressId</AddressId>
                    <Title>title</Title>
                    <Phone>phone</Phone>
                    <AncillaryFields>
                          <AncillaryField>
                                <Attribute>attribute</Attribute>
                                <Value>attributeValue</Value>
```

```
                        </AncillaryField>
                        …
                    </AncillaryFields>
                </PersonInfo>
                …
            </Payload>
```

For each person being added or updated, you can specify a PersonInfo element with the following attributes:

Detail	Type	Description
personRoleType	Analyst, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing	The function that a person plays within your leasing program. A comma-separated list of roles (of type Person) in which this person can participate in transactions.
updateDealStatus	None PreOrigination Active Renewed Evergreen Terminated Disposed All	None, All, or a comma-separated list of states of deals to which changes should be applied where the person being updated is already associated with deals in the specified state. If None, the change will be limited to future deals; if All, the change will be retroactively applied to all deals in which the person is a participant.
importKey	Text	Specifies an external identifier by which the person may be recognized. Note that if partyId is not specified but importKey is, LeaseAccelerator will attempt to look up the importKey to see if this is a known person and, if so, will update the corresponding person. This enables external systems to perform adds and updates using their own identifiers to reference the person.
importSource	Text	Specifies a name for the external source associated with the importKey. This name is limited to 32 characters in length.
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company with which the person is associated.
companyName	Alphanumeric (150)	Name of the entity which you want to use which must already exist in the system. This Company is meant to be the main company for this person, NOT the companies they can act as the role type. This tab does NOT define which companies a person can be a participant for.

Detail	Type	Description
partyId	Integer	The unique party ID used by LeaseAccelerator to identify a person. If specified, the specified person will be updated; if not specified (and if the person cannot be resolved using importKey), a new person will be added.
fullName	Alphanumeric (150)	First name Last name
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify the primary location for the person. If blank, data from corresponding Company Name on Companies Tab will be applied.
title	Alphanumeric (150)	The title of the person
phone	Integer	Phone number of the corresponding person
attribute	Alphanumeric (32)	Name of attribute associated with the company that will be persisted. Custom attribute types can be configured as needed.
attributeValue	Alphanumeric (32)	The code or "value" per Chart of Accounts or accounting system associated with the participant company, if appropriate. Or value associated with custom attribute type.

```
Response:    <Payload>
              <Contacts>
                    <Contact>
                          <CompanyId>companyId</CompanyId>
                          <Company>companyName</Company>
                          <Email>email</Email>
                          <AddressId>addressId</AddressId>
                          <Address1>addressLine1</Address1>
                          <Address2>addressLine2</Address2>
                          <Phone>phone</Phone>
                          <City>city</City>
                          <Country>country</Country>
                          <PostalCode>postalCode</PostalCode>
                          <StateProvince>stateProvince</StateProvince>
                          <PartyId>partyId</PartyId>
                          <FullName>partyName</FullName>
                          <ContactType>companyRoleType</ContactType>
                          <Url>URL</Url>
                          <Title>title</Title>
                          <Phone>phone</Phone>
```

```
                        <AncillaryFields>
                            <AncillaryField>
                                <Attribute>attribute</Attribute>
                                <Value>attributeValue</Value>
                            </AncillaryField>
                            …
                        </AncillaryFields>
            </Contact>
            …
        </Contacts>
</Payload>
```

For each company successfully added or updated from the request, a Contact tag is populated with the following information:

Detail	Type	Description
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location at the specified company in the context of the specified contactTypes.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
phone	Numeric (32)	Telephone number
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
partyId	Integer	The unique party ID used by LeaseAccelerator to identify the person portion of this participant.
fullName	Alphanumeric (150)	First name Last name

Detail	Type	Description
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions
url	Alphanumeric (512)	Website Address - Must be in standard format
title	Alphanumeric (150)	Title
phone	Integer	Phone number of the corresponding person
attribute	Alphanumeric (100)	Name of attribute associated with API Method. Custom attribute types can be configured as needed.
attributeValue	Alphanumeric (100)	A valid value for the specified attribute.

Attach File

Operation: AttachFile

This method may be used to attach documents to a deal. This method is similar to the functionality when using the “Mainfest tab” on the PIW.

```
Request:    <Payload>
        <ArtifactDocument>
            <ArtifactId>artifactId</ArtifactId>
            <CreationDate>creationDate</CreationDate>
            <RenderingType>documentStatus</RenderingType>
       <DateRendered>dateRendered</DateRendered>
            <Comments>comments</Comments>
            <File>file</File>
        </ArtifactDocument>
    </Payload>
```

To attach a document in LeaseAccelerator, you must know the artifactId of the document to which you want to attach the file. Additionally, the request must be sent as a MultiPart POST request, with the actual file to be attached provided as filetoattach. The other parameters in the Request message Payload are:

Detail	Type	Description
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the document to which the file should be attached.
creationDate	Date (MM/DD/YYYY)	The creation date of the document being added/updated. If creationDate is not specified in the request, it will be populated with the current date when the API request is processed.

Detail	Type	Description
renderingType	Amalgam, Executed, Original, PartiallyExecuted, Substitute, Unknown	Document Status/Workflow state of document
dateRendered	Date	The file creation date
comments	Alphanumeric (2000)	Comment field
File	Alphanumeric (250)	File name of document including extension or address for external site. Must be in standard file format xxxxxx.ext. For links to external sites, the entire address must be used.

```
Response:    <Payload>
        <Rendering>
            <ArtifactId>artifactId</ArtifactId>
            <RenderingId>renderingId</RenderingId>
            <DateRendered>renderingDate</DateRendered>
        </Rendering>
    </Payload>
```

The Response contains confirming data about the file captured:

Detail	Type	Description
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the document to which the file was attached.
renderingId	Integer	The unique file-level ID used by LeaseAccelerator to identify the file attached to the document.
renderingDate	Date	The date stored in LeaseAccelerator as the date the file was created.

Bulk Participant Update

Operation: BulkParticipantUpdate

This method allows you to update certain Participant information for active leases that exist in LeaseAccelerator. This import does not change or add existing participant records but will only change the participant(s) for the specified deals. The participant you wish to change to must be configured in LeaseAccelerator prior to doing a Bulk Participant Update for schedules. This functionality is similar to logging into the UI and navigating to the Participant tab within the Bulk Import screen.

```
Request:    <Payload>
              <ParticipantUpdate>
                    <DealNumber>dealNumber</DealNumber>
                    <DocumentType>documentType</DocumentType>
```

```
                    <DocumentNumber>documentNumber</DocumentNumber>
                    <ParticipantType>participantType</ParticipantType>
                    <Company>company</Company>
                     <Person>person</Person>
                    <Address1>addressLine1</Address1>
            <Address2>addressLine2</Address2>
            <City>city</City>
            <StateProvince>stateProvince</StateProvince>
            <Country>country</Country>
            <PostalCode>postalCode</PostalCode>
            <RemoveExisting>removeExistingFlag</RemoveExisting>
      </ParticipantUpdate>
      <ParticipantUpdate>
      …
      </ParticipantUpdate>
</Payload>
```

For each participant update, you can specify the element with the following attributes:

Detail	Type	Description
dealNumber	Alphanumeric (256)	Unique identifier for a lease, i.e., schedule number
documentType	See Document Types list	Category of Document
documentNumber	Alphanumeric (256)	Unique number used as customer reference for the document. This is NOT the system defined artifact-ID. If left blank, system will assign number.
participantType	Company Types: Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor, Lender People Types: Analyst, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing, EntityController, FinanceController, Staff, Treasury Address Type: ShipTo	Choose a valid value for Company Type, People Type, or Address Type that you want to update. For Company Type, you must fill in the company field. For People Type, you must fill in the person field. For Address Type, you must fill in the address fields.

Detail	Type	Description
company	Alphanumeric (150)	For company particpantTypes, this specifies the company to update to. To change the SBU to IT, participantType would be SBU and company would be IT. The specified company must be configured in LeaseAccelerator as the specified participantType and must exactly match a value on Companies Tab where Company Role Type = Area, Geo, Lessee, Entity, Funder, Vendor, PropertyTaxAuthority, Project or SBU.
person	Alphanumeric (150)	For people particpantTypes, this specifies the person to update to. To change the OrderAdministrator to Gary Jones, participantType would be OrderAdministator and person would be Gary Jones. The specified person must be configured in LeaseAccelerator as the specified participantType and must exactly match a value on People Tab where People Role Type = Asset Owner, Analyst, AssetUser, FinanceApprover, OrderAdministrator or Sourcing.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
RemoveExistingFlag	Y N	Specify Y, if the existing participant for the deal/document should be removed and replaced with the specified participant, N if you want the specified participant added to the deal/document.

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Capture Posted Document

Operation: CaptureDocumentId

This method is used to communicate accepted journal entries from the ERP back to LeaseAccelerator.

```
Request:    <Payload>
              <ExternalDocuments>
                    <ExternalDocument>
                          <LedgerEntrySubId>entryIdentifier
</LedgerEntrySubId>
                          <ExternalDocumentId>erpPostingId
</ExternalDocumentId>
                    </ExternalDocument>
                     …
              </ExternalDocuments>
       </Payload>
```

The Payload for a CaptureDocumentId request consists of a set of ExternalDocument tags identifying the journal entries successfully received and posted in the ERP:

Detail	Type	Description
Detail	Type	Description
entryIdentifier	Text	Every entry in the Ledger Export file (line) will have a LedgerEntryLineId, PostingEntryId or PostingId. Send back this field to LeaseAccelerator to acknowledge posting. The API supports any of the entry identifiers from the ledger export file.

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Define Reference Data

Operation: DefineReferenceData

```
Request:    <Payload>
              <ReferenceData>
                     <Source>ledgerName</Source>
                     <Attribute>attributeName</Attribute>
                     <ReferenceSet>
                            <KeyValuePair>
                                   <Value>attributeValue</Value>
                                   <Description>description</Description>
                            </KeyValuePair>
                             …
                     </ReferenceSet>
       </ReferenceData>
</Payload>
```

The DefineReferenceData operation is used to synchronize master data between an external system of record and LeaseAccelerator that will be used to validate segment values for accounting. Warning: Define Reference Data is designed to take a set of master data at a time and thus will replace the existing set. Example: If only one cost center is provided, all other cost centers will be retired and only the one provided in the file will be active. The Payload for a DefineReferenceData request consists of an Attribute tag and an associated ReferenceSet of Value/Description pairs:

Detail	Type	Description
ledgerName/source	Alphanumeric (32);	The set of books to which a schedule should be recorded. This may be one configured ledger or a list. Must exactly match to configured list. See User Interface - Settings: Ledger Name.
attributeName	Text	The attributeName specified must match the Name specified for a segment in the Ledger Number configuration for a Set of Books (ledger) in LeaseAccelerator. Contact your LeaseAccelerator Administrator for a list of the configured segment Names by ledger.
attributeValue	Text	A valid value for the specified attribute. This is the value that will be transferred as part of any export of accounting data.

Detail	Type	Description
description	Varies based on segment type associated with attributeName	The associated context for the value. The validation and use of this context varies depending upon the segment Type of the specified attributeName: ■ Cost Center – description serves as a textual description that is included on-screen in LeaseAccelerator to help provide context to the user during Cost Center selection. If the specified value matches an existing value, the description for that value will be updated; otherwise, a new Cost Center will be configured with the specified value and description. ■ Company, Person, or Address – description identifies the company, person, or address with which the value is associated, based on an external ID. This external ID corresponds to the importKey specified during an AddUpdateCompany, AddUpdatePerson, or AddUpdateAddress request. ■ Product Category – description must match an assetType configured in LeaseAccelerator (see Reference Lists). Reference data cannot be defined via API for GL Code (since that is defined by the configured GL Coding Conventions in LeaseAccelerator), nor for Name (since Name is used to define a hardcoded segment value).

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Federate User

Operation: FederateUser

This method is used to provision credentials in LeaseAccelerator and is intended for use only in environments where Single Sign-On (SSO) is in use.

```
Request:    <Payload>
       <User>
              <FullName>fullName</FullName>
              <Email>email</Email>
              <ExternalId>externalId</ExternalId>
              <UserName>userName</UserName>
              <Company>company</UserName>
              <Language>language</Language>
              <Currency>currency</Currency>
              <Phone>phone</phone>
              <Title>title</Title>
              <RoleTypes>roleTypes</RoleTypes>
              <RoleKey>roleKey</RoleKey>
       </User>
       …
</Payload>
```

The Payload for a FederateUser request consists of a set of User tags:

Detail	Type	Description
fullName	Alphanumeric (150)	First name Last name
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
externalId	Text	The key used by the Identity Provider to uniquely identify this user, and that will be provided as part of authenticating this user through SSO.
userName	Alphanumeric (150)	User name. Often same as email.
company	Alphanumeric (150)	Name of the entity which you want to use which must already exist in the system. This Company is meant to be the main company for this person, NOT the companies they can act as the role type. This tab does NOT define which companies a person can be a participant for.
Language	cn en fr	Chinese English French
phone	Numeric (32)	Telephone number. Valid Format.

Detail	Type	Description
roleTypes	Analyst, ARFRequester, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing	The function that a person plays within your leasing program. A comma-separated list of roles in which this person can participate in transactions.
roleKey	Operations, PortfolioUser, PowerUser, SystemIntegration, User, Staff	The grouping which identifies the extent of functionality that a user is given.

Response: <Payload></Payload>

This method has an empty Payload. The standard Response element indicates whether the users were successfully federated or not.

Find Assets

Operation: FindAssets

This method request consists of a Criteria tag of elements used to constrain what assets should be returned.

```
Request:    <Payload>
              <AssetCriteria>
                    <ArtifactNumber>artifactNumber</ArtifactNumber>
                    <ArtifactType>artifactType</ArtifactType>
                    <RequestedArtifactType>requestedArtifactType
</RequestedArtifactType>
                    <SerialNumber>serialNumber</SerialNumber>
                    <FromDate>dateRangeFrom</FromDate>
                    <ToDate>dateRangeTo</ToDate>
                    <ContactType>contactType</ContactType>
                    <Company>companyName</Company>
                    <FullName>assetParticipantName</FullName>
                    <City>city</City>
                    <StateProvince>stateProvince</StateProvince>
                    <Country>country</Country>
                    <ShowActive>showActive</ShowActive>
                    <ShowTerminated>showTerminated</ShowTerminated>
```

```
                    <ShowDisposed>showDisposed</ShowDisposed>
                    <MaxRows>maxResults</MaxRows>
                </AssetCriteria>
            </Payload>
```

Unless otherwise specified, all Text criteria are searched in a case-insensitive manner and support the * and ? wildcards. Criteria for which a list of valid values is provided do not support wildcarding and are case-sensitive. Almost all elements in the Criteria tag are optional, but at least one criterion other than a contact type or artifact type must be specified with a value not consisting solely of wildcard characters. If multiple search criteria are provided, all criteria must be met ("AND" logic) for a deal to be returned.

Detail	Type	Description
artifactNumber	Text	The identifying number associated with a document in the deal. Note that User-attached documents (not otherwise categorized to a specific document type) and E-mail messages are not considered for search purposes. artifactType must also be specified or artifactNumber will be ignored. Only assets in deals containing a document of the specified artifactType with the specified artifactNumber will be retrieved.
artifactType	See list below	A type of document present in the deal. The document need not have a physical version (e.g.,PDF). artifactNumber must also be specified or artifactType will be ignored. Only assets in deals containing a document of the specified artifactType with the specified artifactNumber will be retrieved.
serialNumber	Alphanumeric (64)	Unique identifier for each assetThe serial number(s) for the asset.
dateRangeFrom dateRangeTo	Date (MM/DD/YYYY)	A pair of dates specifying a date range.

Detail	Type	Description
contactType	Company Types: Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor, Lender People Types: Analyst, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing, EntityController, FinanceController, Staff, Treasury Address Type: ShipTo	Choose a valid value for Company Type, People Type, or Address Type that you want to update. For Company Type, you must fill in the company name field. For People Type, you must fill in the asset participant name field. For Address Type, you must fill in the address fields.
companyName	Alphanumeric (150)	The name of a company participating in the transaction. ContactType must also be specified or companyName will be ignored. Only assets with the specified companyName selected as a document-level participant of the specified ContactType will be retrieved.
assetParticipantName	Alphanumeric (150)	First name Last name. The name of a person or company associated with the asset at the asset- or allocation-level. contactType must also be specified or assetParticipantName will be ignored. Only assets with the specified assetParticipantName selected as an asset- or allocation-level participant of the specified contactType will be retrieved. Contact your LeaseAccelerator Administrator for a list of any additional (custom) configured participant types at the asset- and allocation-level.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
showActive	Y N	Determines whether or not active assets are retrieved. Active assets include Renewed and Evergreen assets.
showTerminated	Y N	Determines whether or not terminated assets are retrieved. Terminated assets are assets where the lessee is still in possession of the asset, but the lease obligation has been terminated, typically assets that have been Bought Out and not otherwise Disposed.

Detail	Type	Description
showDisposed	Y N	Determines whether or not disposed assets are retrieved. Disposed assets are assets where the lease obligation has been terminated and the lessee is no longer in possession of the asset, typically Returned assets and Bought Out assets that have been subsequently, explicitly Disposed.
maxResults	Integer	The maximum number of matching deals to be retrieved. If not otherwise specified, the first 1,000 matches will be retrieved.

```
Response:    <Payload>

                    <Assets>
                          <Asset>
                                <AssetId>assetId</AssetId>
                                <Comments>assetComments</Comments>
                                <SerialNumber>serialNumber</SerialNumber>
                                <AssetTag>assetTag</AssetTag>
                                <LocationId>locationID</LocationID>
                                <ReferenceNumber>referenceNumber
</ReferenceNumber>
                                <IPAddress>ipAddress</IPAddress>
                                <MACAddress>macAddress</MACAddress>
                                <FullyQualifiedName>fqn
</FullyQualifiedName>
                                <CommonName>commonName</CommonName>
                                <CostCenter>costCenter</CostCenter>
                                <GlCode>glCode</GlCode>
                                <ProductNumber>productNumber
</ProductNumber>
                                <ProductCategory>productCategory
</ProductCategory>
                                <Description>description</Description>
                                <Quantity>quantity</Quantity>
                                <UnitPrice>unitPrice</UnitPrice>
                          </Asset>
                    </Assets>
                    …
              </Payload>
```

The Payload for a FindAssets response consists of a list of zero or more Asset tags, each of which contains the details for an asset meeting the specified criteria:

Detail	Type	Description
assetId	Integer	The unique ID used by LeaseAccelerator to identify the asset.
assetComments	Alphanumeric (2500)	Free form field for user comments
serialNumber	Alphanumeric (64)	Unique identifier for each assetThe serial number(s) for the asset.
assetTag	Alphanumeric (64)	A field available to customers to group assets. Typically, the asset tag assigned by your physical asset management (PAM) or IT asset management (ITAM) team and. This may serve as a linking ID for reference to an external PAM or ITAM ssystem. This attribute is not used by LeaseAccelerator beyond reporting, andreporting and may be repurposed.
LocationId	Integer	The unique address ID used by LeaseAccelerator to identify a location.
referenceNumber	Alphanumeric (150)	Free form field which may be used for any number of reference numbers desired. This is often used to store a PO number or other operational reference information.
ipAddress	Alphanumeric (32)	Description field used for identifying the Internet Points of Presence (POPs). This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
macAddress	Alphanumeric (32)	Description field often used for IT-related equipment. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
fqn	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
commonName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.
glCode	Alphanumeric (128)	GL Coding Convention ruleset that maps to the series of account codes where accounting transactions are recorded for this asset. Must exactly match value set during GL Configuration in UI; Settings: Ledger Number: Set of Books Edit: GL Code (Coding Convention). Enter only if different than Lease Start Date
productNumber	Alphanumeric (64)	A unique identifier for equipment typically used to delineate the type of equipment in the manufacturer's product catalogue.
productCategory	See Product Category list	Grouping of assets by type
description	Alphanumeric (1024)	Description of equipment or real estate which may include model year, make, lot number, parcel number, and other descriptors.

Detail	Type	Description
quantity	Numeric (Total = 18, Precision = 2)	Number of units. Must be >0; If blank, system assumes 1
unitPrice	Numeric (Total = 18, Precision = 2)	The original equipment cost of the asset.

For a richer set of attributes at the asset-level, consider using the Generate method to run a BU Asset report.

Find Contacts

Operation: FindContacts

This method may be used to find contact information based on a certain set of criteria.

```
Request:    <Payload>
              <Contact>
                    <Scope>contactScope</Scope>
                    <FullName>fullName</FullName>
                    <Company>companyName</Company>
                    <City>city</City>
                    <Country>country</Country>
                    <StateProvinceLong>province</StateProvinceLong>
              </Contact>
       </Payload>
```

The Payload for a FindContacts request consists of a Criteria tag of elements used to constrain what contacts should be returned.

Detail	Type	Description
contactScope	Company Person Address	The type of contact retrieved. This field does not support wildcarding and is case-sensitive.
fullName	Alphanumeric	The full name of the person as entered in LeaseAccelerator.
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization. Criteria on this field are searched in a case-insensitive manner and support the * and ? wildcards.
city	Alphanumeric (150)	The name of the city to add to the search criteria.

Detail	Type	Description
country	Alphanumeric (150)	The name of the country to add to the search criteria.
stateProvince	Alphanumeric (150)	The long name of the state or province to add to the search criteria.

```
Response:    <Payload>
              <Contacts>
                    <Contact>
                          <CompanyId>companyId</CompanyId>
                          <Company>companyName</Company>
                          <Email>email</Email>
                          <AddressId>addressId</AddressId>
                          <Address1>addressLine1</Address1>
                          <Address2>addressLine2</Address2>
                          <Phone>phone</Phone>
                          <City>city</City>
                          <Country>country</Country>
                          <PostalCode>postalCode</PostalCode>
                          <StateProvince>stateProvince</StateProvince>
                          <PartyId>partyId</PartyId>
                          <FullName>fullName</FullName>
                          <ContactType>contactType</ContactType>
                          <Url>URL</Url>
                          <Title>title</Title>
                    </Contact>
                     …
              </Contacts>
       </Payload>
```

For each company successfully added or updated from the request, a Contact tag is populated with the following information:

Detail	Type	Description
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company

Detail	Type	Description
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location at the specified company in the context of the specified contactTypes.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
phone	Numeric (32)	Telephone number
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
partyId	Integer	The unique party ID used by LeaseAccelerator to identify the person portion of this participant.
fullName	Alphanumeric (150)	First name Last name
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions
url	Alphanumeric (512)	Website Address - Must be in standard format
title	Alphanumeric (150)	Title

Find Deals

Operation: FindDeals

This method request consists of a Criteria tag of elements used to constrain what deals should be returned.

```
Request:    <Payload>
              <Criteria>
                    <ArtifactNumber>artifactNumber</ArtifactNumber>
                    <ArtifactType>artifactType</ArtifactType>
                    <ArtifactState>artifactState</ArtifactState>
                    <FromDate>dateRangeFrom</FromDate>
                    <ToDate>dateRangeTo</ToDate>
```

```
                    <ContactType>contactType</ContactType>
                    <Company>company</Company>
                    <City>city</City>
                    <StateProvince>stateProvince</StateProvince>
                    <Country>country</Country>
                    <Status>status</Status>
                    <MaxRows>maxResults</MaxRows>
                    <DealList>dealList</DealList>
            </Criteria>
            <TargetArtifact>targetartifactType</TargetArtifact>
            <ArtifactNumber>artifactNumber</ArtifactNumber>
    </Payload>
```

Unless otherwise specified, all Text criteria are searched in a case-insensitive manner and support the * and ? wildcards. Criteria for which a list of valid values is provided do not support wildcarding and are case-sensitive. All elements in the Criteria tag are optional, but at least one criterion other than MaxRows must be specified with a value not consisting solely of wildcard characters. If multiple search criteria are provided, all criteria must be met ("AND" logic) for a deal to be returned. Note that related criteria will be applied in combination.

Detail	Type	Description
artifactNumber	Text	The identifying number associated with a document in the deal. Note that User-attached documents (not otherwise categorized to a specific document type) and E-mail messages are not considered for search purposes. artifactType must also be specified or artifactNumber will be ignored. Only assets in deals containing a document of the specified artifactType with the specified artifactNumber will be retrieved.
artifactType	See list below	A type of document present in the deal. The document need not have a physical version (e.g.,PDF). artifactNumber must also be specified or artifactType will be ignored. Only assets in deals containing a document of the specified artifactType with the specified artifactNumber will be retrieved.
artifactState	Internal use only	An internal document state code identifying the workflow state for a document in the deal. This attribute is reserved for internal use only.
dateRangeFrom dateRangeTo	Date (MM/DD/YYYY)	A pair of dates specifying a date range.

Detail	Type	Description
contactType	Company Types: Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor, Lender	Choose a valid value for Company Type, People Type, or Address Type that you want to update. For Company Type, you must fill in the company name field.
companyName	Alphanumeric (150)	The name of a company participating in the transaction. ContactType must also be specified or companyName will be ignored. Only assets with the specified companyName selected as a document-level participant of the specified ContactType will be retrieved.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
Status	None PreOrigination Active Renewed Evergreen Terminated Disposed All	Limit returned deals to deals in the specified stage of the leasing lifecycle.
maxResults	Integer	The maximum number of matching deals to be retrieved. If not otherwise specified, the first 1,000 matches will be retrieved.
dealList	Text	A comma-separated list of LeaseAccelerator Deal Ids

An optional TargetArtifact and the ArtifactNumber tag may be included to specify how the results are identified.

Detail	Type	Description
targetArtifactType	See list below	A type of document present in the deal. If this tag is omitted, deals will be identified by their Deal Summary number, or by the most advanced document in the workflow if the deal has not yet reached the stage of having a Deal Summary. Note that the artifactType specified in the TargetArtifact tag may be the same as or different from the artifactType specified as a criterion, and either or both may be omitted from the Payload.

Detail	Type	Description
artifactNumber	Text	The identifying number associated with a document in the deal. Note that User-attached documents (not otherwise categorized to a specific document type) and E-mail messages are not considered for search purposes. artifactType must also be specified or artifactNumber will be ignored. Only assets in deals containing a document of the specified artifactType with the specified artifactNumber will be retrieved.

```
Response:    <Payload>
              <Transactions>
                     <Transaction>
                            <DealId>dealId</DealId>
                            <LastTouched>dateLastTouched</LastTouched>
                             <LeaseStartDate>leaseStartDate</LeaseStartDate>
                            <ArtifactNumber>artifactNumber</ArtifactNumber>
                            <ArtifactId>artifactId</ArtifactId>
                            <ArtifactType>artifactType</ArtifactType>
                            <ArtifactCurrency>currency</ArtifactCurrency>
                            <ArtifactValue>artofactValue</ArtifactValue>
                            <PrimaryParty>participant</PrimaryParty>
                             <SecondaryParty>participant</SecondaryParty>
                            <SearchBucket>searchBucket</SearchBucket>
                            <Status>dealStatus</Status>
                            <Term>termInMonths</Term>
                     </Transaction>
                     …
              </Transactions>
       </Payload>
```

The Payload for a FindDeals response consists of a list of zero or more Transaction tags, each of which summarizes the key information for a deal meeting the specified criteria:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.
dateLastTouched	Date (MM/DD/YYYY)	The date the transaction was most recently acted upon.

Detail	Type	Description
leaseStartDate	Date (MM/DD/YYYY)	The lease commencement date for the transaction.
artifactNumber	Text	The identifying number associated with the key document in the deal. If a TargetArtifact was specified in the request criteria, that artifactType will override whatever would have been returned as the default key document.
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the key document.
artifactType	See list below	The type of document identified as being the key document for the deal, typically Deal Summary. If a TargetArtifact was specified in the request criteria, that artifactType will override whatever would have been returned as the default key document type.
currency	See list below	The currency in which the deal was transacted.
artifactValue	Numeric	The Original Equipment Cost of the lease transaction.
participant	Text	The key participant(s) in the deal, which may be the name of a company (e.g.,the Lessee), the name of a person (e.g.,the responsible Order Administrator), or a brief location description (e.g.,state or country of Ship To).
searchBucket	Pre-Origination Active Terminated/Disposed	Limit returned deals to deals in the specified stage of the leasing lifecycle.
dealStatus	None PreOrigination Active Renewed Evergreen Terminated Disposed All	A text description summarizing the status of the deal. This is often more granular and descriptive than the searchBucket, particularly during the pre-origination process, and when one or more partial EOT events has taken place.
termInMonths	Integer	The initial lease term, as converted to months. For example, a lease with 3 annual payments would return 36 for the termInMonths.

Generate Report or Document

Operation: Generate

This method consists of the set of parameters needed to generate the requested document or report.

See Generate Report Asynch for additional report generation options.

```
Request:    <Payload>
              <Report>
                     <ReportName>reportName</ReportName>
                     <Format>format</Format>
                     <ZipThreshold>zipThreshold</ZipThreshold>
                     <ReportParameters>
                            <Parameter>
                                   <Name>parameterName</Name>
                                   <Value>parameterValue</Value>
                            </Parameter>
                            …
                     </ReportParameters>
                     <Parameters>
                            <Parameter>
                                   <Name>parameterName</Name>
                                   <Value>parameterValue</Value>
                            </Parameter>
                            …
                     </Parameters>
              </Report>
       </Payload>
```

The Payload for a Generate request consists of the set of parameters needed to generate the requested document or report. If ReportName is a valid artifactType (see list below), the request will be taken as a request to “render” (typically, produce a PDF version of) the document, and a single Parameter must be provided – P_ARTIFACTID – which specifies the unique LeaseAccelerator identifier for the document being rendered. For reports, the related parameters vary from report to report.

To pass the input parameters, two tags available, ReportParameter and Parameters. Either of the tag can be used in the payload but not both.

Detail	Type	Description
reportName	See list	The name of a configured report or document type to be rendered. The report/document type must be accessible to the user with whom the API session was authenticated, or to the P_USERNAME specified as a Parameter.

Detail	Type	Description
format	PDF XLS XLSX XML	A valid format configured for the requested report/document. Not all reports/documents are configured for all output formats; consult your LeaseAccelerator Administrator to determine what formats are supported for your desired report/document.
zipThreshold	Alphanumeric	
parameterName	See list	The name of a parameter to be used in generating the document or report. While the list of parameters varies from report to report, the following three parameters are particularly significant: P_ARTIFACTID – This parameter is required when rendering a document, and specifies the unique LeaseAccelerator identifier for the document. P_ASATDATE – For reports that support "as at" reporting, this specifies that the report should only reflect information known "as at" the end of day of the specified date. "As at" dates in the future may yield inconsistent results, since future events can only be assumed, and are subject to change. P_USERNAME – If specified, indicates that the report is to be run as this user.
parameterValue	Text	This specifies the value to be used for the associated parameterName. Note that the actual data type varies from parameter to parameter (see list below).

Response: varies

The response to a Generate request is the resulting report or document. If XML, the response will constitute a properly structured XML document conforming to the report output specifications. Any other format (typically PDF or XLSX) will be sent as an application/octet-stream. In many cases, the Generate method is leveraged as a mechanism for transferring data from LeaseAccelerator to external systems. Please contact your LeaseAccelerator Administrator for details on which reports may have been enabled for XML output in support of integration.

BUAsset

The BUAsset report is one of the most commonly utilized reports for integration, particularly with Asset Management systems. While the actual parameters vary from client to client, the typical configuration supports the following parameters:

Detail	Type	Description
P_ASATDATE	Date	The date to be used to determine what data should be included in the report. Only deals and assets known “as at” the specified date will be included, and the cost, rent, and status values will reflect the values “as at” that date.
P_BU	See list	Used to filter the list of assets returned. Only assets on leases for which the specified company participates as Business Unit will be returned.
P_CITY	Text	Used to filter the list of assets returned. Only assets located in the specified city will be returned.
P_COSTCENTER	Text	Used to filter the list of assets returned. Only assets allocated – at least partially – to the specified cost center will be returned.
P_COUNTRY	See list below	Used to filter the list of assets returned. Only assets located in the specified country will be returned.
P_FUNDERID	Integer	Used to filter the list of assets returned. Only assets on leases for which the specified company ID participates as the Funder will be returned.
P_ PRODUCTCATEGORY	See list below	Used to filter the list of assets returned. Only assets of the specified asset type will be returned.
P_ REMAININGMONTHS	Integer	Used to filter the list of assets returned. Only assets which are scheduled to reach natural end of term (or which are in evergreen) within the specified number of months will be returned.
P_SCHEDULE	Text	Used to filter the list of assets returned. Only assets on the specified lease schedule will be returned.
P_SERIALNUMBER	Text	Used to filter the list of assets returned. Only assets matching the specified serial number will be returned. Wildcards (* and ?) may be used.
P_SHOWCHILDREN	Y N	Used to filter the list of assets returned. If set to N, assets which roll up to a parent asset will be excluded from the report.
P_SHOWTERMINATED	Y N	Used to filter the list of assets returned. If set to N, only Active, Renewed, or Evergreen assets will be returned.

The Response payload of the BUAsset report is typically identical to the Response payload for the FindAssets operation.

LedgerExport

The LedgerExport report is commonly used for ERP integration, to transfer debits and credits to the GL. While the actual parameters vary from client to client, a typical request Payload for the LedgerExport report looks like:

```
<Payload>
	<Report>
		<ReportName>LedgerExport</ReportName>
```

```
<Format>XML</Format>
<ReportParameters>
	<Parameter>
		<Name>P_ASATDATE</Name>
		<Value>asAtDate</Value>
	</Parameter>
	<Parameter>
		<Name>P_STARTING_FISCALYEAR</Name>
		<Value>fiscalYear</Value>
	 </Parameter>
	<Parameter>
		<Name>P_PERIODDATE</Name>
		<Value>periodCode</Value>
	</Parameter>
	<Parameter>
		<Name>P_LOOKFORWARD</Name>
		<Value>numMonths</Value>
	</Parameter>
	<Parameter>
		<Name>P_DETAILLEVEL</Name>
		<Value>detailLevel</Value>
	 </Parameter>
	<Parameter>
		<Name>P_EXCLUDETAG</Name>
		<Value>excludetags</Value>
	</Parameter>
	<Parameter>
		<Name>P_SCHEDULE</Name>
		<Value>scheduleNumber</Value>
	</Parameter>
	<Parameter>
		<Name>P_ENTITY</Name>
		<Value>entity</Value>
	</Parameter>
	<Parameter>
```

```
            <Name>P_COSTCENTER</Name>
            <Value>costCenter</Value>
        </Parameter>
        <Parameter>
            <Name>P_BUSINESSUNIT</Name>
            <Value>sbu</Value>
        </Parameter>
        <Parameter>
            <Name>P_COUNTRY</Name>
            <Value>country</Value>
        </Parameter>
        <Parameter>
            <Name>P_LESSEE</Name>
            <Value>lessee</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER</Name>
            <Value>ledgerId</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGERNAME</Name>
            <Value>ledgerName</Value>
        </Parameter>
        <Parameter>
            <Name>P_DENOMINATION_CURRENCY</Name>
            <Value>currency</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_1</Name>
            <Value>glSegment1</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_2</Name>
            <Value>glSegment2</Value>
        </Parameter>
```

```
<Parameter>
       <Name>P_LEDGER_SEGMENT_3</Name>
       <Value>glSegment3</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_4</Name>
       <Value>glSegment4</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_5</Name>
       <Value>glSegment5</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_6</Name>
       <Value>glSegment6</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_7</Name>
       <Value>glSegment7</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_8</Name>
       <Value>glSegment8</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_9</Name>
        <Value>glSegment9</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_10</Name>
       <Value>glSegment10</Value>
</Parameter>
<Parameter>
       <Name>P_LEDGER_SEGMENT_11</Name>
       <Value>glSegment11</Value>
```

```
                    </Parameter>
                    <Parameter>
                        <Name>P_EXCLUDENEWENTRIES</Name>
                        <Value>excludeNotYetTransferred<</Value>
                    </Parameter>
                    <Parameter>
                        <Name>P_EXCLUDETRANSFERREDENTRIES</Name>
                        <Value>excludeTransferredEntries</Value>
                    </Parameter>
                    <Parameter>
                        <Name>P_EXCLUDEPOSTEDENTRIES</Name>
                        <Value>excludeTransferredandPostedEntries</Value>
                    </Parameter>
                </ReportParameters>
        </Report>
</Payload>
```

The parameters to the LedgerExport report operate as follows:

Detail	Type	Description
asAtDate	Date	The data exported should only reflect information known “as at” the end of day of the specified date. Ledger entries are typically transferred to the ERP “as at” the last day of the fiscal period. Note that using an “as at” date in the future may produce misleading or incorrect results, as future behavior must be inferred.
ledgerId	Integer	The unique identifier for a set of books in LeaseAccelerator. Please contact your LeaseAccelerator Administrator for a list of valid ledgerId values. Even though the tag is required, the value can be left blank if ledgerName tag is specified.
ledgerName	Text	The unique name for a set of books in LeaseAccelerator. Please contact your LeaseAccelerator Administrator for a list of valid ledgerName values. If this tag value is specified, ledgerId value can be left blank.
detailLevel	ASSET SCHEDULE PORTFOLIO	The level of granularity at which ledger entries should be transferred to the ERP. Regardless of this setting, debits and credits will always be separated based on ledger account coding, e.g.,cost center allocation. For GL entries, PORTFOLIO is typically the preferred level of detail.
fiscalYear	Integer	The fiscal year number, e.g.,2016, from which to start when transferring ledger entries.

Detail	Type	Description
periodCode	Integer	The fiscal period from which to start transferring ledger entries. Values 0 through 11 represent the months of the fiscal year (i.e. 0=January…11=December for December year end, 0=May…11=April for April year end, etc.). Other allowable values are as follows: ■ -4 - Q1 ■ -3 - Q2 ■ -2 - Q3 ■ -1 - Q4 ■ -10 - Current Month ■ -20 - Prior Month ■ -100 - Current Quarter ■ -200 - Prior Quarter
numMonths	Integer	The number of fiscal months for which to transfer ledger entries.
scheduleNumber	Text	An optional parameter which limits the ledger entries transferred to a specific schedule (or set of schedules if a wildcard character is included). If omitted, ledger entries are transferred for all schedules in the specified set of books that have entries in the specified reporting window (as defined by the combination of fiscalYear, periodCode, and numMonths).
costCenter	Alphanumeric (32)	Used to filter the list of ledger entries returned. Only ledger entries which book to the specified cost center will be returned.
currency	See list below	Used to filter the list of ledger entries returned. Only ledger entries for leases denominated in the specified currency will be returned.

```
Response:    <Payload>
              <LedgerEntry>
                    <LedgerDate>ledgerDate</LedgerDate>
                    <AccountNumber>accountNumber</AccountNumber>
                    <AccountDescription>accountName</AccountDescription>
                    <Segment1>clientLedgerSegment1</Segment1>
                    <Segment2>clientLedgerSegment2</Segment2>
                    … (up to Segment11)
                    <DRCR>DRCR</DRCR>
```

```
                    <Currency>currency</Currency>
                    <FXDate>applicableFXDate</FXDate>
                    <Amount>amount</Amount>
                    <Comments>comments</Comments>
                    <LedgerEntrySubId>ledgerEntrySubId</LedgerEntrySubId>
                    <LedgerEntryId>ledgerEntryId</LedgerEntryId>
                    <LedgerEntryLineId>ledgerEntryLineId</LedgerEntryLineId>
                    <PostingEntryId>postingEntryID</PostingEntryId>
                    <PostingId>postingId</PostingId>
            </LedgerEntry>
            …
    </Payload>
```

The response Payload for a LedgerExport report consists of a list of zero or more ledger entries. Each LedgerEntry includes the following information:

Detail	Type	Description
ledgerDate	Date	The ledger date for the posting.
accountNumber	Text	The ERP account number to which the amount should be posted.
accountName	Text	The descriptive name of the ERP account (e.g.,OPEX Expense).
clientLedgerSegmentn	Text	A ledger segment as configured through the LeaseAccelerator Settings page. LeaseAccelerator supports up to eleven client-specific ledger segments, each of which may be mapped to a corresponding ERP field. Contact your LeaseAccelerator Administrator to determine how your ledger segments are configured for each configured set of books.
DRCR	DR CR	Indicates whether this posting is a debit or credit against the specified account.
currency	See list	The transactional currency of the ledger entry.
applicableFXDate	Date	The date that should be used for FX conversion from transactional currency to functional currency, if different.
amount	Number	The amount of the debit/credit.
comments	Text	Provides context for the posting. If the detailLevel was specified in the Request as SCHEDULE, this will include the Schedule number; if detailLevel was specified as ASSET, comments will include the unique LeaseAccelerator identifier for the associated asset.

Detail	Type	Description
ledgerEntrySubId	Text	Every entry in the Ledger Export file (line) will have a unique LedgerEntrySubId.
ledgerEntryId	Text	Entries sharing the same LedgerEntryID constitute a balanced entry.
ledgerEntryLineId	Text	Every entry in the Ledger Export file (line) will have a ledgerEntryLineId. Send back the ledgerEntryLineId(s) to LeaseAccelerator to acknowledge posting using CaptureDocumentId.
postingEntryId	Text	Every entry in the Ledger Export file (line) will have a postingEntryId that will identify a balanced entry. Send back the postingEntryId (s) to LeaseAccelerator to acknowledge posting using CaptureDocumentId. Note: postingEntryId will group by adjustment date.
postingId	Text	Every entry in the Ledger Export file (line) will have a unique postingId that will identify a balanced entry. Send back the postingId(s) to LeaseAccelerator to acknowledge posting using CaptureDocumentId. Note: postingId will not group by adjustment date.

PayablesExport

This report shows the payment information to be transferred to the AP system and is commonly used for ERP integration. While the actual parameters vary from client to client, a typical request Payload for the PayablesExport report looks like:

```
<Payload>
	<Report>
		<ReportName>PayablesExport</ReportName>
		<Format>XML</Format>
		<ReportParameters>
			<Parameter>
				<Name>P_ASATDATE</Name>
				<Value>asAtDate</Value>
			</Parameter>
			<Parameter>
				<Name>P_STARTING_FISCALYEAR</Name>
				<Value>fiscalYear</Value>
			</Parameter>
			<Parameter>
				<Name>P_PERIODDATE</Name>
				<Value>periodCode</Value>
```

```
</Parameter>
<Parameter>
	<Name>P_LOOKFORWARD</Name>
	<Value>numMonths</Value>
</Parameter>
<Parameter>
	<Name>P_PAYABLESDETAILLEVEL</Name>
	<Value>payablesdetailLevel</Value>
</Parameter>
<Parameter>
	<Name>P_EXCLUDETAG</Name>
	<Value>excludetags</Value>
</Parameter>
<Parameter>
	<Name>P_DENOMINATION_CURRENCY</Name>
	<Value>currency</Value>
</Parameter>
<Parameter>
	<Name>P_LEDGER</Name>
	<Value>ledgerId</Value>
</Parameter>
 <Parameter>
	<Name>P_LEDGERNAME</Name>
	<Value>ledgerName</Value>
</Parameter>
<Parameter>
	<Name>P_EXCLUDEEVERGREEN</Name>
	<Value>excludeEvergreen</Value>
</Parameter>
<Parameter>
	<Name>P_SCHEDULE</Name>
	<Value>scheduleNumber</Value>
</Parameter>
<Parameter>
	<Name>P_ENTITY</Name>
```

```
        <Value>entity</Value>
    </Parameter>
    <Parameter>
        <Name>P_LESSEE</Name>
        <Value>lessee</Value>
    </Parameter>
    <Parameter>
        <Name>P_BUSINESSUNIT</Name>
        <Value>sbu</Value>
    </Parameter>
    <Parameter>
        <Name>P_COUNTRY</Name>
        <Value>country</Value>
    <Parameter>
        <Name>P_COSTCENTER</Name>
        <Value>costCenter</Value>
     </Parameter>
    <Parameter>
        <Name>P_LESSEE</Name>
        <Value>lessee</Value>
    </Parameter>
    <Parameter>
        <Name>P_LEDGER_SEGMENT_1</Name>
        <Value>glSegment1</Value>
    </Parameter>
    <Parameter>
        <Name>P_LEDGER_SEGMENT_2</Name>
        <Value>glSegment2</Value>
    </Parameter>
    <Parameter>
        <Name>P_LEDGER_SEGMENT_3</Name>
         <Value>glSegment3</Value>
    </Parameter>
    <Parameter>
        <Name>P_LEDGER_SEGMENT_4</Name>
```

```
            <Value>glSegment4</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_5</Name>
            <Value>glSegment5</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_6</Name>
            <Value>glSegment6</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_7</Name>
            <Value>glSegment7</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_8</Name>
            <Value>glSegment8</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_9</Name>
            <Value>glSegment9</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_10</Name>
             <Value>glSegment10</Value>
        </Parameter>
        <Parameter>
            <Name>P_LEDGER_SEGMENT_11</Name>
            <Value>glSegment11</Value>
        </Parameter>
        <Parameter>
            <Name>P_EXCLUDENEWENTRIES</Name>
            <Value>excludeNotYetTransferred</Value>
        </Parameter>
        <Parameter>
```

```
                        <Name>P_EXCLUDETRANSFERREDENTRIES</Name>
                        <Value>excludeTransferredEntries</Value>
                    </Parameter>
                    <Parameter>
                        <Name>P_EXCLUDEPOSTEDENTRIES</Name>
                        <Value>excludeTransferredandPostedEntries</Value>
                    </Parameter>
                </ReportParameters>
        </Report>
</Payload>
```

The parameters to the LedgerExport report operate as follows:

Detail	Type	Description
asAtDate	Date	The data exported should only reflect information known “as at” the end of day of the specified date. Ledger entries are typically transferred to the ERP “as at” the last day of the fiscal period. Note that using an “as at” date in the future may produce misleading or incorrect results, as future behavior must be inferred.
ledgerId	Integer	The unique identifier for a set of books in LeaseAccelerator. Please contact your LeaseAccelerator Administrator for a list of valid ledgerId values. Even though the tag is required, the value can be left blank if ledgerName tag is specified.
ledgerName	Text	The unique name for a set of books in LeaseAccelerator. Please contact your LeaseAccelerator Administrator for a list of valid ledgerName values. If this tag value is specified, ledgerId can be left blank.
payablesdetailLevel	SCHEDULE PORTFOLIO	The level of granularity at which ledger entries should be transferred to the ERP. Regardless of this setting, debits and credits will always be separated based on ledger account coding, e.g.,cost center allocation. For GL entries, PORTFOLIO is typically the preferred level of detail.
fiscalYear	Integer	The fiscal year number, e.g.,2016, from which to start when transferring ledger entries.

Detail	Type	Description
periodCode	Integer	The fiscal period from which to start transferring ledger entries. Values 0 through 11 represent the months of the fiscal year (i.e. 0=January…11=December for December year end, 0=May…11=April for April year end, etc.). Other allowable values are as follows: ■ -4 - Q1 ■ -3 - Q2 ■ -2 - Q3 ■ -1 - Q4 ■ -10 - Current Month ■ -20 - Prior Month ■ -100 - Current Quarter ■ -200 - Prior Quarter
numMonths	Integer	The number of fiscal months for which to transfer ledger entries.
scheduleNumber	Text	An optional parameter which limits the ledger entries transferred to a specific schedule (or set of schedules if a wildcard character is included). If omitted, ledger entries are transferred for all schedules in the specified set of books that have entries in the specified reporting window (as defined by the combination of fiscalYear, periodCode, and numMonths).
costCenter	Alphanumeric (32)	Used to filter the list of ledger entries returned. Only ledger entries which book to the specified cost center will be returned.
currency	See list below	Used to filter the list of ledger entries returned. Only ledger entries for leases denominated in the specified currency will be returned.

ParticipantValidation

This report shows companies, people and addresses. While the actual parameters vary from client to client, a typical request Payload for the ParticipantValidation report looks like:

```
<Payload>
	<Report>
		<ReportName>PartipantValidation</ReportName>
		<Format>XLSX</Format>
```

```
            <ReportParameters>
                    <Parameter>
                          <Name>P_ROLETYPE</Name>
                           <Value>roleType</Value>
                    </Parameter>
                    <Parameter>
                          <Name>P_LESSEE</Name>
                          <Value>company</Value>
                    </Parameter>
            </ReportParameters>
      </Report>
</Payload>
```

The parameters to the LedgerExport report operate as follows:

Detail	Type	Description
reportName	See list	The name of a configured report or document type to be rendered. The report/document type must be accessible to the user with whom the API session was authenticated, or to the P_USERNAME specified as a Parameter.
format	PDF XLS XLSX XML	A valid format configured for the requested report/document. Not all reports/documents are configured for all output formats; consult your LeaseAccelerator Administrator to determine what formats are supported for your desired report/document.
roleType	Company Types: Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor, Lender People Types: Analyst, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing, EntityController, FinanceController, Staff, Treasury Address Type: ShipTo	Choose a valid value for Company Type, People Type, or Address Type that you want to validate.
companyName	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.

Generate Report Asynch

Operation: GenerateAsynch

This method is like the Generate method as it consists of the set of parameters needed to generate the requested document or report.

The only difference between the Generate API and the GenerateAsynch API, is that instead of the report being returned directly to the screen, this API will just make the call and return the request id.

1. Run Generate Report Asynch which will return a request id.
2. Use request id returned as input to the Get Report Status operation.
3. Rerun until Get Report Status returns a status of Success and non-null Endtime.
4. Next retrieve the actual file using request id as input to the Get Report File operation.

The request payload is same as the Synchronous Generate Report or Document operation.

```
Response:    <Payload>
            <Results>
                <Report>
                    <ReportRequestId>reportRequestId</ReportRequestId>
                    <Name>reportName</Name>
                    <Format>format</Format>
                    <Status>status</Status>
                </Report>
                ...
            </Results>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
reportRequestId	Number	This is the request id for the report request which can be used to track the status and download the report later.
reportName	See list	The name of a configured report or document type to be rendered. The report/document type must be accessible to the user with whom the API session was authenticated, or to the P_USERNAME specified as a Parameter.

Detail	Type	Description
format	PDF XLS XLSX XML	This is the format of the requested report. Not all reports/documents are configured for all output formats.
status	Success Failed	The status of the request.

Get Booking Status

Operation: GetBookingStatus

The GetBookingStatus operation is used to fetch the status of booking tasks in LeaseAccelerator.

The request payload is as below. Note, it is empty, no parameters are needed.

Request: <Payload>

</Payload>

```
Response:    <Payload>
            <BookingStatus>
                <IsRunning>yesOrNo</IsRunning>
            </BookingStatus>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
yesOrNo	Y N	If the booking task is currently running the return value will be “Y” else “N”.

Get Latest Month-End Close Date

Operation: GetLatestClose

The GetLatestClose operation is used to fetch most recent month-end close date.

The request payload is as below. Note, it is empty, no parameters are needed.

Request: <Payload>

</Payload>

```
Response:    <Payload>
```

```
      <MonthEndCloseDetails>
          <EffectiveDate>effectiveDate</EffectiveDate>
        <DateClosed>dateClosed</DateClosed>
        <UserName>user</UserName>
        <Comments>comments</Comments>
    </MonthEndCloseDetails>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
effectiveDate	Date	The end of the month the close took effect.
dateClosed	Date	The actual date the user performed the month-end close.
user	Alphanumeric	The user name of the LeaseAccelerator user that performed the close.
comments	Alphanumeric	The comments entered by the user when closing the period.

Get Report Status

Operation: GetReportStatus

The GetReportStatus operation is used to fetch the status of Generate Report Asynch based on the request id.

1. Run Generate Report Asynch which will return a request id.
2. Use request id returned as input to the Get Report Status operation.
3. Rerun until Get Report Status returns a status of Success and non-null Endtime.
4. Next retrieve the actual file using request id as input to the Get Report File operation.

The request payload is as below.

```
Request:    <Payload>
                    <ReportStatus>
                          <ReportRequestId>reportRequestId</ReportRequestId>
                    </ReportStatus>
                    …
             </Payload>
```

This operation accepts the Report Request Id in payload to fetch the status of the reports corresponding to that id.

```
Response:    <Payload>
             <Results>
                 <ReportStatus>
                     <ReportRequestId>reportRequestId</ReportRequestId>
                     <Status>status</Status>
                     <Cancelled>cancelled</Cancelled>
                     <FileName>filename</FileName>
                     <EndTime>endTime</EndTime>
                 </ReportStatus>
                 ...
             </Results>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
reportRequestId	Number	This is the request id for the requested report which can be used to track the status and download the report later.
status	Success Failed	The status of the report.
filename	Alphanumeric	File name of the generated report.
cancelled	Y N	This is the flag which informs whether the report request cancelled or not.
endTime	DateTime	This shows the date and time the report completed.

Get Report File

Operation: GetReportFile

The GetReportFile operation is used to fetch the file generated by the Generate Report Asynch operation based on the request id.

1. Run Generate Report Asynch which will return a request id.
2. Use request id returned as input to the Get Report Status operation.
3. Rerun until Get Report Status returns a status of Success and non-null Endtime.
4. Retrieve the actual file using request id as input to the Get Report File operation.

The request payload is as below.

```
Request:    <Payload>
              <ReportFile>
                    <ReportRequestId>reportRequestId</ReportRequestId>
              </ReportFile>
              …
       </Payload>
```

This operation accepts the Report Request Id in payload to fetch the report for the request id provided.

Response: varies

The response to a GetReportFile request is the resulting report or document. If XML, the response will constitute a properly structured XML document conforming to the report output specifications. Any other format (typically PDF or XLSX) will be sent as an application/octet-stream. In many cases, the GetReportFile method is leveraged as a mechanism for transferring data from LeaseAccelerator to external systems. Please contact your LeaseAccelerator Administrator for details on which reports may have been enabled for XML output in support of integration.

Get Reportable Status

Operation: GetReportableStatus

The GetReportableStatus operation is used to fetch the status of sweeping and booking tasks in LeaseAccelerator typically to determine if it is safe to run areport.

The request payload is as below. Note, it is empty, no parameters are needed.

Request: <Payload>

</Payload>

```
Response:    <Payload>
            <ReportableStatus>
                <SystemProcessing>yesOrNo</SystemProcessing>
                          <ProcessingDetails>details</ProcessingDetails>
            </ReportableStatus>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
yesOrNo	Y N	If the sweeping task is currently running the return value will be “Y” else “N”.
Details	Text	The status of any processing that is currently underway, if applicable.

Get Sweeping Status

Operation: GetSweepingStatus

The GetSweepingStatus operation is used to fetch the status of sweeping tasks in LeaseAccelerator.

The request payload is as below. Note, it is empty, no parameters are needed.

Request: <Payload>

</Payload>

```
Response:    <Payload>
             <SweepingStatus>
                 <IsRunning>yesOrNo</IsRunning>
                <SweepingDetails>details</SweepingDetails>
             </SweepingStatus>
</Payload>
```

The response tags details are listed below

Detail	Type	Description
yesOrNo	Y N	If the sweeping task is currently running the return value will be “Y” else “N”.
Details	Text	The status of the actual sweep, if applicable.

Get Documents for Deal

Operation: GetDocumentsforDeal

```
Request:    <Payload>
              <DocumentArtifact>
                    <DealId>dealId</DealId>
                    <ArtifactType>artifactType</ArtifactType>
              </DocumentArtifact>
       </Payload>
```

Parameters in the Payload are:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.
artifactType	See list below	The type of document.

```
Response:    <Payload>
              <Transactions>
                    <Artifact>
                          <Id>artifactId</Id>
                          <ArtifactId>artifactId</ArtifactId>
                          <ArtifactType>artifactType</ArtifactType>
                          <ArtifactNumber>artifactNumber</ArtifactNumber>
                          <Comments>comments</Comments>
                          <Currency>currency</Currency>
                          <Id>dealId</Id>
                          <Value>value</Value>
                          <CreationDate>creationDate</CreationDate>
                          <DateReceived>dateReceived</DateReceived>
                          <Status>artifactStatus</Status>
                    </Artifact>
                     …
              </Transactions>
       </Payload>
```

For each artifact successfully retrieved from the request, an Artifact tag is populated with the following information:

Detail	Type	Description
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the document added/updated.
artifactType	See list	The type of document added/updated.
artifactNumber	Text	The identifying number associated with the document that was added/updated. Note that if neither artifactId nor artifactNumber was specified in the request, the artifactNumber will be automatically assigned by the system.
Comments	Text	The comments provided for the artifact in the request.
Currency	See Currency list	The currency provided for the artifact in the request.
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify the deal to which the artifact was added/updated.
Value	Numeric	The total value of the artifact based on the aggregation of the line items.
creationDate	Date (MM/DD/YYYY)	The creation date of the document being added/updated. If creationDate is not specified in the request, it will be populated with the current date when the API request is processed.

Detail	Type	Description
dateReceived	Date (MM/DD/YYYY)	The date of receipt of the document being added/updated. If dateReceived is not specified in the request, it will be populated with the current date when the API request is processed.
artifactStatus	Text	A text description summarizing the status of the document.

Get Events for Deal

Operation: GetEventsforDeal

```
Request:    <Payload>
            <EventCriteria>
                    <DealId>dealId</DealId>
             </EventCriteria>
       </Payload>
```

Parameters in the Payload are:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.

```
Response:    <Payload>
             <Event>
                    <Id>Id</Id>
                    <EventType>eventType</EventType>
                    <DealId>dealId</DealId>
                    <UserName>userName</UserName>
                    <Comments>comments</Comments>
                    <IsSuperseded>issuperseded</IsSuperseded>
                    <Timestamp>eventDate</Timestamp>
             </Event>
       </Payload>
```

For each event successfully retrieved from the request, an Event tag is populated with the following information:

Detail	Type	Description
Id	Integer	The unique document ID used by LeaseAccelerator to identify a specific document within a deal.
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.

Detail	Type	Description
eventType	Text	Type of event
userName	Text	The name used to record the event. If not specified, this defaults to the user credentials used to authenticate the API connection.
comments	Text	A free-form text block of additional comments to be recorded as part of the event.
isSuperseded	Text	Is event superseded by another event.
eventDate	Date	Date of Event

Get Participants for Deal Artifacts

Operation: GetParticipantsForDealArtifacts

```
Request:    <Payload>
              <DocumentArtifact>
                    <DealId>dealId</DealId>
                    <ArtifactId>artifactId</ArtifactId>
              </DocumentArtifact>
       </Payload>
```

Parameters in the Payload are:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.
artifactId	Integer	The unique artifact ID used by LeaseAccelerator to identify the key document.

```
Response:    <Payload>
                    <Parties>
                          <Contact>
                                <CompanyId>companyId</CompanyId>
                                <Company>companyName</Company>
                                <Email>email</Email>
                                <AddressId>addressId</AddressId>
                                <Address1>addressLine1</Address1>
                                <Address2>addressLine2</Address2>
                                <Phone>phone</Phone>
                                <City>city</City>
                                <Country>country</Country>
                                <PostalCode>postalCode</PostalCode>
```

```
                                    <StateProvince>stateProvince
</StateProvince>
                                    <PartyId>partyId</PartyId>
                                    <FullName>partyName</FullName>
                                    <ContactType>companyRoleType</ContactType>
                                    <Url>URL</Url>
                                    <Title>title</Title>
                                </Contact>
                                …
                            </Parties>
                        </Payload>
```

For each participant successfully retrieved from the request, a Contact tag is populated with the following information:

Detail	Type	Description
companyId	Integer	The unique company ID used by LeaseAccelerator to identify the company
company	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location at the specified company in the context of the specified contactTypes.
addressLine1	Alphanumeric (250)	Street Address. The specified address must be configured in LeaseAccelerator.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
phone	Numeric (32)	Telephone number
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
partyId	Integer	The unique party ID used by LeaseAccelerator to identify the person portion of this participant.
fullName	Alphanumeric (150)	First name Last name
contactType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	Company Type Role in which this company can participate in transactions

Detail	Type	Description
url	Alphanumeric (512)	Website Address - Must be in standard format
title	Alphanumeric (150)	Title

Import Addresses

Operation: ImportAddresses

This method may be used to import addresses. This method is similar to the functionality when using the “Address tab” on the CIW.

> **Note: NOTE:** For Company addresses (i.e., the company tab on the CIW), use the Import Company method. For People addresses (i.e., the people tab on the CIW), use the Import People method.

Addresses are specific workplaces in your organization where employees work and/or equipment may be physically located or shipped to. This would also include the physical location of any leased Real Estate. They are typically associated with a Lessee, Entity, or Business Unit. (There may be a 1: n relationship because companies may have multiple teams “sitting” at a single location.) Please see notes above regarding specific validation reminders pertaining to the address fields.

Please note that if Customers want to utilize the Facility Code field on the PIW, they must ensure that an associated Facility Code is entered on this tab when importing the ShipTo addresses. If each address has an associated Facility Code, those Facility Codes may be used on the PIW in lieu of the ShipTo Address fields.

```
Request:    <Payload>
              <Addresses>
                    <Address>
                          <AddressRoleType>addressRoleType</AddressRoleType>
                          <CompanyName>companyName</CompanyName>
                          <AddressLine1>addressLine1</AddressLine1>
                          <AddressLine2>addressLine2</AddressLine2>
                          <City>city</City>
                          <StateProvince>stateProvince</StateProvince>
                          <Country>country</Country>
                          <PostalCode>postalCode</PostalCode>
                          <FacilityCode>facilityCode</FacilityCode>
                          <LedgerCode>ledgerCode</LedgerCode>
                    </Address>
              </Addresses>
              …
       </Payload>
```

For each address being added, you can specify an Address element with the following attributes:

Detail	Type	Description
addressRoleType	ShipTo	The function that this location plays within your leasing program.
companyName	Alphanumeric (150)	Name of the location used as reference within your company where assets are located.
parentCompanyName	Alphanumeric (150)	The highest organization within a company's legal structure.
addressLine1	Alphanumeric (250)	Street Address.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	See Country Province List	Postal Abbreviation for acceptable Countries.
stateProvince	Alphanumeric (32) See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
facilityCode	Alphanumeric (100)	Facility Code (ShipTo Key) is a customer code associated with a specific ShipTo Address. Using a Facility Code as on the PIW eliminates the need to enter any values in the ShipTo Address fields in the PIW only. Unique value, code cannot exist in the system already.
ledgerCode	Alphanumeric (32)	The "value" used by your accounting system to identify the work location. Typically, this is one of many portions of an overall General Ledger string

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
        …
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Assets

Operation: ImportAssets

This method may be used to refresh the asset-level details for a specific deal. Only one deal at a time may be updated via an ImportAssets request. The Payload for an ImportAssets request consists of an identifier which uniquely identifies the deal for which asset-level details should be repopulated, and a series of LineItem tags, specifying the new asset details. This method is similar to the functionality when using the “Details tab” on the PIW.

```
Request:    <Payload>
              <ArtifactNumberGroup>artifactNumber</ArtifactNumberGroup>
                    <Assets>
                          <LineItem>
                                <ProductCategory>productCategory
</ProductCategory>
                                <ExternalId>externalId</ExternalId>
                                <ProductNumber>productNumber
</ProductNumber>
                                <Manufacturer>manufacturer</Manufacturer>
                                <Description>description</Description>
                                <CostCenter>costCenter</CostCenter>
                                <Project>project</Project>
                                <GLCode>glCodingConvention</GLCode>
                                <ReferenceNumber>referenceNumber
</ReferenceNumber>
                                <Quantity>quantity</Quantity>
                                <UnitPrice>unitPrice</UnitPrice>
                                <SerialNumber>serialNumber</SerialNumber>
                                <AssetTag>assetTag</AssetTag>
                                <Comments>assetComments</Comments>
                                <AssetOwner>assetOwner</AssetOwner>
                                <AssetUser>assetUser</AssetUser>
                                <AddressId>addressId</AddressId>
                                <ShipToId>shipToId</ShipToId>
                                <ShipToKey>shipToKey</ShipToKey>
                                <MACAddress>macAddress</MACAddress>
```

```
                                    <IPAddress>ipAddress</IPAddress>
                                    <CommonName>commonName</CommonName>
                                    <FullyQualifiedName>fqn
</FullyQualifiedName>
                                    <ServiceState>serviceState</ServiceState>
                                    <CompanyCode>companyCode</CompanyCode>
                                    <ProfitCenter>profitCenter</ProfitCenter>
                                    <InternalOrder>internalOrder
</InternalOrder>
                                    <Project>project</Project>
                                    <Vendor>vendor</Vendor>
                                    <AllocationPercent>allocationPercen
t</AllocationPercent>
                                    <DefaultDispositionEOT>disposition
</DefaultDispositionEOT>
                            </LineItem>
                            …
                </Assets>
        </Payload>
```

The data elements available as part of the ImportAssets method are:

Detail	Type	Description
dealId	Integer	The unique ID used by LeaseAccelerator to identify a deal.
artifactNumber	Text	The identifying number associated with a document in the deal being updated. Note that either dealId or artifactNumber must be specified in the request, but only one is required. If dealId is specified, artifactNumber will be ignored.
productCategory	See Product Category list	Grouping of assets by type
externalId	Alphanumeric (64)	Used to identify parent/child relationships (if any) for a group of assets. If you have multiple parent assets with associated child assets, you must list them each on their own line. Each parent assets get a whole number in External Id and each child asset to that parent has the associated .1, .2, etc.
productNumber	Alphanumeric (64)	A unique identifier for equipment typically used to delineate the type of equipment in the manufacturer's product catalogue.
manufacturer	Alpha (200)	Company Name. This field may be used to identify the Real Estate Developer for a real estate lease.
description	Alphanumeric (1024)	Description of equipment or real estate which may include model year, make, lot number, parcel number, and other descriptors.

Detail	Type	Description
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.
glCode	Alphanumeric (128)	GL Coding Convention ruleset that maps to the series of account codes where accounting transactions are recorded for this asset. Must exactly match value set during GL Configuration in UI; Settings: Ledger Number: Set of Books Edit: GL Code (Coding Convention). Enter only if different than Lease Start Date
referenceNumber	Alphanumeric (150)	Free form field which may be used for any number of reference numbers desired. This is often used to store a PO number or other operational reference information.
quantity	Numeric (Total = 18, Precision = 2)	Number of units. Must be >0; If blank, system assumes 1
unitPrice	Numeric (Total = 18, Precision = 2)	Original equipment cost per unit in local currency. This is not an extended price; that will be calculated by LeaseAccelerator. Must be >0
serialNumber	Alphanumeric (64)	Unique identifier for each asset.
assetTag	Alphanumeric (64)	A field available to customers to group assets. Typically, the asset tag assigned by your physical asset management (PAM) or IT asset management (ITAM) team and. This may serve as a linking ID for reference to an external PAM or ITAM ssystem. This attribute is not used by LeaseAccelerator beyond reporting, andreporting and may be repurposed.
comments	Alphanumeric (2500)	Free form field for user comments
assetOwner	Alphanumeric (150)	Name or employee responsible from organization/fiduciary perspective. Must exactly match value on People Tab where People Role Type = Asset Owner.
assetUser	Alphanumeric (150)	Name of employee with custodial responsibility. Must exactly match value on People Tab where Person Role Type = Asset User.
addressId	Integer	The unique address ID used by LeaseAccelerator to identify the address at which the asset(s) is currently located.
shipToId	Integer	The unique address ID used by LeaseAccelerator to identify the address at which the asset(s) is currently located.
shipToKey	Alphanumeric (100)	Customer code (Facility Code) which may be used instead of any of the ShipTo fields. Code must exist in system already, having been configured with an Address Bulk Import from the CIW.
macAddress	Alphanumeric (32)	Description field often used for IT-related equipment. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.

Detail	Type	Description
ipAddress	Alphanumeric (32)	Description field used for identifying the Internet Points of Presence (POPs). This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
commonName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
fullyQualifiedName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
serviceState	Alphanumeric (128)	A description field often used by customers to define the work state of an asset. Examples may include: Out for Repair, Under Construction, In Service. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
companyCode	Alphanumeric (100)	Company Code assigned to the asset.
profitCenter	Alphanumeric (100)	Profit Center assigned to the asset.
internalOrder	Alphanumeric (100)	Internal Order assigned to the asset.
project	Alphanumeric (100)	Project assigned to the asset.
vendor	Alphanumeric (100)	Vendor assigned to the asset.
allocationPercent	Numeric	The percentage of the asset that is to be applied to the given cost center, GL Code and any customer allocation participants.
disposition	Alphanumeric	Default action to take on the asset at end-of-term. Valid values include ZeroBuyout or Evergreen

```
Response:    <Payload>
             <ImportResults>
                    <severity>severity</severity>
                    <message>message</message>
             </ImportResults>
             …
             </Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Companies

Operation: ImportCompanies

This method may be used to add new companies. This method is similar to the functionality when using the “Company tab” on the CIW.

Note: For ShipTo addresses (i.e., the address tab on the CIW), use the Import Addresses method. For People addresses (i.e., the people tab on the CIW), use the Import People method.

The Companies tab defines those companies that are a part of your leasing program. Each company, however, may perform a different role or function. Examples include:

- Lessees – the legal party to the agreement leasing the equipment or renting the real estate
- Funders – also referred to as lessors: they provide the cash to finance the equipment purchase through a lease agreement
- Entity: Organization you consider to be the Lessee (may be different than actual Lessee). An Entity must have a functional currency selected.
- Business Units (BU) – an internal reporting group
- Vendors – various other parties such as the equipment manufacturer or supplier, an assignee, or an organization to whom you pay an initial direct cost to or receive a lease incentive from

It is required that data be input into tabs in a top-down manner by order of generality. In other words, if a company is listed as a Parent, it should appear in the tab above, according to the hierarchy.

Note: State/Province entry field is only allowed for the following Countries: Australia, Brazil, Canada, China, India, Ireland, Italy, Japan, Mexico, and the US. For the US, please use the standard 2-character abbreviation. Click here to view the list of acceptable provinces.

You will see that the worksheet asks for an address for each of these companies. We know that companies have many locations, therefore this address should be the primary mailing location.

The Functional Currency field should be populated for any Entity. You may only have one Functional Currency for a single Entity.

Tips:

- If country is United States, the value of US must be used. Entering anything other than the US will cause an error.
- If you enter address information on the Companies tab, the minimum required fields for system import are City and Country.
- If one of your Company Role Types (Lessee, Entity, BU, etc.) is a part of your General Ledger String therefore one of the segments, then an associated Ledger Code is required for accurate reporting. You only need to populate this field for those participants that are part of your GL String. A Company may only have one Ledger Code associated with it, so if it listed multiple times because of multiple Company Role Types, ensure it has the same Ledger Code each time.

- While Addresses and Contact information are not required fields for system import, we do recommend that you give us this detail, particularly for your Funders and Vendors, as this will allow you to easily access this information as needed for communication with Funders and Vendors regarding your leases with them.

- A Company can only have one parent and it must be the same for every mention or line item that is used for that Company.

- A Company can also only have one address listed so if that company is listed more than once with different role types, ensure that the address used (if any) is identical each time the company is listed.

```
Request:    <Payload>
              <Companies>
                    <Company>
                          <CompanyRoleType>companyRoleType</CompanyRoleType>
                          <CompanyName>companyName</CompanyName>
                          <ParentName>parentName</ParentName>
                          <URL>url</URL>
                          <AddressLine1>addressLine1</AddressLine1>
                          <AddressLine2>addressLine2</AddressLine2>
                          <City>city</City>
                          <StateProvince>stateProvince</StateProvince>
                          <Country>country</Country>
                          <PostalCode>postalCode</PostalCode>
                          <Contact>contact</Contact>
                          <Phone>phone</Phone>
                          <Email>email</Email>
                          <LedgerCode>ledgerCode</LedgerCode>
                          <FunctionalCurrency>functionalCurrency
</FunctionalCurrency>
                    </Company>
              </Companies>
              …
       </Payload>
```

For each company being added, you can specify a Company element with the following attributes:

Detail	Type	Description
companyRoleType	Area, Entity, Funder, Geo, Lessee, Project, PropertyTaxAuthority, SBU, Vendor	This is a description of the function that this company plays within your leasing program.
companyName	Alphanumeric (150)	Name of the entity which you want to use within the system. This may or may not be the official legal name of the entity. This may be a subsidiary of a larger organization.
parentCompanyName	Alphanumeric (150)	The highest organization within a company's legal structure.
url	Alphanumeric (512)	Website Address - Must be in standard format
addressLine1	Alphanumeric (250)	Street Address.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation.
stateProvince	Alphanumeric (32) See Country Province List	Postal Abbreviation for acceptable Countries.
country	See Country List	The country component of the address.
postalCode	Alphanumeric (16)	The postal/zip code of the address.
contactName	Alphanumeric (150)	First Name, Last Name of Primary Contact
phone	Numeric (32)	Telephone number
email	Alphanumeric (150)	Email address for POC - Valid Format contains @xxx
ledgerCode	Alphanumeric (32)	The code or "value" per Chart of Accounts or accounting system associated with the participant company, if appropriate.
functionalCurrency	See currency list	Functional Currency is the currency which is used for accounting purposes. This currency is common for all contracts for the specified company role. The functional currency causes a remeasurement of accounting transactions from the local or transaction currency so that all contracts are accounted for using the same currency. Each Entity may only have 1 Functional Currency.

```
Response:    <Payload>
             <ImportResults>
                    <severity>severity</severity>
                    <message>message</message>
             </ImportResults>
             …
```

```
        </Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Deals

Operation: ImportDeals

This method provides a mechanism for importing specific information about each lease schedule and asset within your lease portfolio into LeaseAccelerator, in a single operation, with all information populated. It is modeled on the PIW workbook and is similar to the following tabs:

- The Schedule tab is the control list of your lease population and contains information about each lease that applies at the schedule level.
- The Details tab contains details for each piece of equipment or real estate contained on a lease schedule.
- End of Term options is information for each lease defining the available actions which could occur at the end of the lease term.
- The Interim Rent tab allows the user to input specific Interim Rent information related to schedule.
- The Step Payments tab identifies and captures the payment schedule for the changing payments.
- The Schedule Related Expenses tab enables the user to import ancillary expenditures that are required by the lease agreement or that have a direct impact on the accounting for a lease and are incremental to the base rent.
- The Invoice Related Expenses tab enables a customer to import the actual invoiced amounts for Other Related expenses.
- This Paid Related Expenses tab enables a customer to import the actual paid amounts for Other Related Expenses, which are approved for payment and sent to Accounts Payable.
- The Payment Adjustments tab enables a customer to import new payment schedules during a lease term.

Note: This method does NOT run Lease Classification Engine. Please see Import and Classify Deals for invoking this process.

```
Request:    <Payload>
              <Deal>
                    <ScheduleNumber>scheduleNumber</ScheduleNumber>
                    <LeaseStartDate>leaseStartDate</LeaseStartDate>
                    <Ledger>ledger</Ledger>
                    <LedgerDate>ledgerDate</LedgerDate>
                    <Currency>currency</Currency>
                    <PONumber>poNumber</PONumber>
                    <Entity>entity</Entity>
                    <SBU>businessUnit</SBU>
                    <IBR>ibr</IBR>
                    <AccountingClassification>accountingClassification
</AccountingClassification>
                    <OverrideExplanation>overrideExplanation
</OverrideExplanation>
                    <Lessee>lesseeCompany</Lessee>
                    <Funder>funderCompany</Funder>
                    <ShipToCompany>shipToCompany</ShipToCompany>
                    <ShipToAddress1>address1</ShipToAddress1>
                    <ShipToAddress2>address2</ShipToAddress2>
                    <ShipToCity>city</ShipToCity>
                    <ShipToStateProvince>stateProvince</ShipToStateProvince>
                    <ShipToCountry>country</ShipToCountry>
                    <ShipToPostalCode>postalCode</ShipToPostalCode>
                    <ShipToKey>shipToKey</ShipToKey>
                    <Geo>geographicArea</Geo>
                    <ReportingArea>reportingArea</ReportingArea>
                    <AssetOwner>assetOwner</AssetOwner>
                    <AssetOwnerId>assetOwnerId</AssetOwnerId>
                    <AssetUser>assetUser</AssetUser>
                    <AssetUserId>assetUserId</AssetUserId>
                    <OrderAdministrator>orderAdministrator
</OrderAdministrator>
                    <OrderAdministratorId>orderAdministratorId
</OrderAdministratorId>
                    <FinanceApprover>financeApprover</FinanceApprover>
                    <Vendor>vendor</Vendor>
```

```
                    <Intercompany>intercompany</Intercompany>
                    <PartialBuildingFlag>partialBuildingFlag
</PartialBuildingFlag>
                    <IsSubleased>isSubleased</IsSubleased>
                          <Assets>
                                <LineItem>
                                      <ProductCategory>productCategory
</ProductCategory>
                                      <ExternalId>externalId</ExternalId>
                                      <ProductNumber>productNumber
</ProductNumber>
                                      <Manufacturer>manufacturer
</Manufacturer>
                                      <Description>description
</Description>
                                      <CostCenter>costCenter</CostCenter>
                                      <Project>project</Project>
                                      <GLCode>glCode</GLCode>
                                      <AvailableDate>availableDate
</AvailableDate>
                                      <DepreciationStartDate>
depreciationStartDate</DepreciationStartDate>
                                      <ReferenceNumber>referenceNumber
</ReferenceNumber>
                                      <Quantity>quantity</Quantity>
                                      <UnitPrice>unitPrice</UnitPrice>
                                      <ObservablePrice>observablePrice
</ObservablePrice>
                                      <UnitRent>unitRent</UnitRent>
                                      <SerialNumber>serialNumber
</SerialNumber>
                                      <AssetTag>assetTag</AssetTag>
                                      <Comments>assetComments</Comments>
                                      <AssetOwner>assetOwner</AssetOwner>
                                      <AssetOwnerId>assetOwnerId
</AssetOwnerId>
                                      <AssetUser>assetUser</AssetUser>
                                      <AssetUserId>assetUserId
</AssetUserId>
```

```
                                        <AddressId>addressId</AddressId>
                                        <CompanyCode>shipToCompanyCode
</CompanyCode>
                                        <ShipToCompany>shipToCompany
</ShipToCompany>
                                        <ShipToAddress1>shipToAddress1
</ShipToAddress1>
                                        <ShipToAddress2>shipToAddress2
</ShipToAddress2>
                                        <ShipToCity>shipToCity</ShipToCity>
                                        <ShipToStateProvince>
shipToStateProvince</ShipToStateProvince>
                                        <ShipToPostalCode>shipToPostalCode
</ShipToPostalCode>
                                        <ShipToCountry>shipToCountry
</ShipToCountry>
                                        <ShipToKey>facilityCode</ShipToKey>
                                        <MACAddress>macAddress</MACAddress>
                                        <IPAddress>ipAddress</IPAddress>
                                        <CommonName>commonName</CommonName>
                                        <FullyQualifiedName>fqn
</FullyQualifiedName>
                                        <ServiceState>serviceState
</ServiceState>
                                        <CostType>costType</CostType>
                                        <AllowableExpenseCode>
allowableExpenseCode</AllowableExpenseCode>
                                        <Task>task</Task>
                                        <Site>site</Site>
                                        <ReportingUnit>reportingUnit
</ReportingUnit>
                                        <ProfitCenter>profitCenter
</ProfitCenter>
                                        <PlantCode>plantCode</PlantCode>
                                        <IntercompanyLE>intercompanyLE
</IntercompanyLE>
                                        <IntercompanySite>intercompanySite
</IntercompanySite>
                                        <InternalOrder>internalOrder
</InternalOrder>
```

```
                                        <Vendor>vendor</Vendor>
                                        <AllocationPercent>allocationPercent
</AllocationPercent>
                                        <DefaultDispositionEOT>disposition
</DefaultDispositionEOT>
                                </LineItem>
                                …
                        </Assets>
                        <Terms>
                                <PaymentFrequency>paymentFrequency
</PaymentFrequency>
                                <LeaseType>leaseType</LeaseType>
                                <Duration>duration</Duration>
                                <ReasonablyCertainHoldingPeriod>
holdingPeriod</ReasonablyCertainHoldingPeriod>
                                <Lrf>blendedLrf</Lrf>
                                <PaymentAmount>periodicPayment
</PaymentAmount>
                                <Fiir>interestRate</Fiir>
                                <PaymentBasis>paymentBasis</PaymentBasis>
                                <IndexDescription>floatingRateBasis
</IndexDescription>
                                <BenchmarkDate>benchmarkDate
</BenchmarkDate>
                                <AdjustmentFrequency>adjustmentFrequency
</AdjustmentFrequency>
                                <Spread>spreadOverBasis</Spread>
                                <EstimatedGRV>estimatedGuaranteedResidual
</EstimatedGRV>
                                <RentEscalationCap>rentEscalationCap
</RentEscalationCap>
                                <RepaymentMode>repaymentMode
</RepaymentMode>
                                <ResidualPct>residualPercent</ResidualPct>
                                <DownPayment>initialPaymentAmount
</DownPayment>
                                <InterimRentType>interimRentType
</InterimRentType>
                                <InterimRentBasis>interimRentBasis
</InterimRentBasis>
```

```
                                    <InterimRate>interimRate</InterimRate>
                                    <InterimSpread>interimSpread
</InterimSpread>
                                    <InterimIndexType>interimIndexType
</InterimIndexType>
                                    <InterimRentAmount>interimRent
</InterimRentAmount>
                                    <InterimLRF>interimLRF</InterimLRF>
                                    <Options>
                                          <Option>
                                                <OptionType>optionType
</OptionType>
                                                <Timing>optionTiming</Timing>
                                                <ReasonablyCertain>
reasonablyCertain</ReasonablyCertain>
                                                <MonthNumber>monthExercisabl
e</MonthNumber>
                                                <NotificationRequired>
notificationRequired</NotificationRequired>
                                                <MinDaysNotice>
minimumDaysNotice</MinDaysNotice>
                                                <MaxDaysNotice>
maximumDaysNotice</MaxDaysNotice>
                                                <ExercisableByLessee>
exercisableByLessee</ExercisableByLessee>
                                                 <BuyoutPrice>purchasePrice
</BuyoutPrice>
                                                 <MinimumBuyout>
minimumPurchasePrice</MinimumBuyout>
                                                <BuyoutCap>
maximumPurchasePrice</BuyoutCap>
                                                <RenewalTerm>renewalTerm
</RenewalTerm>
                                                <RenewalPayment>renewalPayment
</RenewalPayment>
                                                 <RenewalPaymentLRF>
renewalPaymentLRF</RenewalPaymentLRF>
                                                <UtilityPayment>utilityPayment
</UtilityPayment>
                                                <UtilityUnits>utilityUnits
</UtilityUnits>
```

```
                                                <MinimumPayment>
minimumRenewalPayment</MinimumPayment>
                                                <RenewalCap>
maximumRenewalPayment</RenewalCap>
                                                <ReturnFee>returnFee
</ReturnFee>
                                                <FeeLimit>maximumReturnFee
</FeeLimit>
                                                <LessSaleProceeds>
reduceFeeBySaleProceeds</LessSaleProceeds>
                                                <Comments>optionComments
</Comments>
                                        </Option>
                                        …
                                </Options>
                                <StepPaymentSchedule>
                                        <Step>
                                                <StartingPayment>monthNumber
</StartingPayment>
                                                <NumPayments>numberOfPayments
</NumPayments>
                                                <PaymentFrequency>
stepPaymentFrequency</PaymentFrequency>
                                                <Amount>stepPaymentAmount
</Amount>
                                        </Step>
                                        …
                                </StepPaymentSchedule>
                        </Terms>
                        <ScheduledExpenses>
                                <ScheduledExpense>
                                        <ExpenseType>expenseType
</ExpenseType>
                                        <ExpenseSubtype>expenseSubtype
</ExpenseSubtype>
                                        <PaymentFrequency>paymentFrequency
</PaymentFrequency>
                                        <ProductCategory>productCategory
</ProductCategory>
                                        <Payee>payee</Payee>
```

```
                                        <BenchmarkAmount>
benchmarkPaymentAmount</BenchmarkAmount>
                                        <EscalationCap>escalationCap
</EscalationCap>
                                        <PaymentCeiling>paymentCeiling
</PaymentCeiling>
                                        <PaymentDate>scheduledPaymentDate
</PaymentDate>
                                        <PaymentAmount>
scheduledPaymentAmount</PaymentAmount>
                                        <InterestBearing>interestBearingFlag
</InterestBearing>
                                        <InterestRate>interestRate
</InterestRate>
                                        <Currency>currency</Currency>
                                  </ScheduledExpense>
                                  …
                            </ScheduledExpenses>
                            <InvoicedExpenses>
                                  <InvoicedExpense>
                                        <ExpenseType>expenseType
</ExpenseType>
                                        <ExpenseSubtype>expenseSubtype
</ExpenseSubtype>
                                        <InvoiceAmount>invoiceAmount
</InvoiceAmount>
                                        <InvoiceDate>invoiceDate
</InvoiceDate>
                                        <InvoiceNumber>invoiceNumber
</InvoiceNumber>
                                        <ProductCategory>relatedAssetTyp
e</ProductCategory>
                                        <Payee>payee</Payee>
                                        <ServicePeriodStart>
servicePeriodStart</ServicePeriodStart>
                                        <ServicePeriodEnd>servicePeriodEnd
</ServicePeriodEnd>
                                        <PaymentType>paymentOrRefund
</PaymentType>
                                        <Currency>currency</Currency>
                                  </InvoicedExpense>
```

```
                                    …
                              </InvoicedExpenses>
                              <PaidExpenses>
                                    <PaidExpense>
                                          <ExpenseType>expenseType
</ExpenseType>
                                          <ExpenseSubtype>expenseSubtype
</ExpenseSubtype>
                                          <AmountPaid>paymentAmount
</AmountPaid>
                                          <PaymentDate>paymentDate
</PaymentDate>
                                          <InvoiceDate>invoiceDate
</InvoiceDate>
                                          <InvoiceNumber>invoiceNumber
</InvoiceNumber>
                                          <ProductCategory>relatedAssetType
</ProductCategory>
                                          <Payee>payee</Payee>
                                          <ServicePeriodStart>
servicePeriodStart</ServicePeriodStart>
                                          <ServicePeriodEnd>servicePeriodEnd
</ServicePeriodEnd>
                                          <Currency>currency</Currency>
                                          <PaymentType>paymentOrRefund
</PaymentType>
                                    </PaidExpense>
                                     …
                              </PaidExpenses>
                              <PaymentAdjustments>
                                    <PaymentAdjustment>
                                          <DealId>dealId</DealId>
                                          <ArtifactNumber>artifactNumber
</ArtifactNumber>
                                          <EffectiveDate>effectiveDate
</EffectiveDate>
                                          <RemeasurementEffectiveDate>
remeasurementDate</RemeasurementEffectiveDate>
                                          <Amount>amount</Amount>
                                          <Reason>reason</Reason>
```

```
                                        <Timing>timing</Timing>
                                        <Comments>comments</Comments>
                            </PaymentAdjustment>
                            …
                        </PaymentAdjustments>
                <Deal>
                …
        </Payload>
```

For each deal to be loaded, the payload should include a Deal tag populated with the following information:

Detail	Type	Description
scheduleNumber	Alphanumeric (256)	Unique identifier for a lease.
leaseStartDate	Date (MM/DD/YYYY)	The commencement date or takedown date. The date when the duration of the lease starts and therefore the payment schedule begins.
ledger	Alphanumeric (32); multiple separated by comma	The set of books to which a schedule should be recorded. This may be one configured ledger or a list. Must exactly match to configured list. See User Interface - Settings: Ledger Name. If not specified, and only one ledger is configured, the deal will be automatically booked into the only configured ledger.
ledgerDate	Date (MM-DD-YYY)	The date that transaction becomes known and should be recognized from an accounting perspective.
currency	See currency list	The currency used to value the line items on the deal being loaded.
poNumber	Alphanumeric (256)	Internal Reference number that matches the customer's ERP Procurement Purchase Order Number to the Supplier's. If a deal contains assets spanning multiple Purchase Orders, the ReferenceNumber tag at the asset level may be more appropriate to use.
entity	Alphanumeric (150)	Primary business entity which should match one of the entities listed on Companies Tab. Must exactly match value from Companies Tab where Company Role Type = Entity
SBU	Alphanumeric (150)	Operational group within customer organization primarily used for management reporting. (Known on CIW as SBU.) Must exactly match value from Companies Tab where Company Role Type = SBU.

Detail	Type	Description
ibr	Numeric (Total = 8, Precision = 6) expressed as a percent ##.####%	Incremental Borrowing Rate. Will default to configuration value if blank.
accountingClassification	Capital, Operating, Capitalized-Operating	For ASC840, Operating or Capital Leases. For ASC842 Capitalized Operating or Finance. For IFRS 16, Finance. Leave blank to engage automated LA Classification Engine
overrideExplanation	Alphanumeric (2500)	Explanation for accounting classification. Required if Accounting Classification is input
lessee	Alphanumeric (150)	The legal party to the agreement leasing the equipment or renting the real estate. Real estate leases may refer to this as the Tenant. Must exactly match a Lessee listed on the Companies Tab with the Company Role Type = Lessee.
funder	Alphanumeric (150)	Also referred to as Lessor, they provide the cash to finance the equipment purchase through a lease agreement. Real Estate leases may refer to this as the Landlord. Must exactly match a Lessee listed on the Companies Tab with the Company Role Type = Funder.
shipToCompany	Alphanumeric (150)	This must be the individual location name where the asset is physically located.
shipToAddressLine1	Alphanumeric (250)	Mailing address line 1 of ShipTo Company.
shipToAddressLine2	Alphanumeric (250)	Mailing address line 2 of ShipTo Company.
shipToCity	Alphanumeric (100)	Mailing address City of ShipTo Company.
shipToStateProvince	Alphanumeric (32) See Country and Province List	Mailing address postal abbreviation for acceptable countries of ShipTo Company.
shipToCountry	See Country List	Mailing address Country of ShipTo Company.
shipToPostalCode	Alphanumeric (16)	Mailing address Postal Code of ShipTo Company.
shipToKey	Alphanumeric (100)	Customer code (Facility Code) which may be used instead of any of the ShipTo fields. Code must exist in system already, having been configured with an Address Bulk Import from the CIW.
geo	See Country List	Country Name that governs the accounting and tax rules for a transaction.

Detail	Type	Description
reportingArea	Alphanumeric (150)	Participant used to drive internal management reporting which is typically used for geographic region but may be used for other reporting requirements. Must exactly match value on Companies Tab where Company Role Type = Area
assetOwner	Alphanumeric (150)	Name or employee responsible from organization/fiduciary perspective. Must exactly match value on People Tab where People Role Type = Asset Owner
assetOwnerId	Numeric	The LeaseAccelerator internal Id of the Asset Owner for the deal.
assetUser	Alphanumeric (150)	Name of employee with custodial responsibility. Must exactly match value on People Tab where People Role Type = Asset User
assetUserId	Numeric	The LeaseAccelerator internal Id of the Asset User for the deal.
orderAdministrator	Alphanumeric (150)	Name of employee responsible for procurement. Must exactly match value on People Tab where People Role Type = Order Administrator
orderAdministratorId	Numeric	The LeaseAccelerator internal Id of the Order Administrator for the deal.
financeApprover	Alphanumeric (150)	Name of employees responsible for approving deal from Finance organization. Must exactly match value on People Tab where People Role Type = Finance Approver
vendor	Alphanumeric (150)	A company providing a service related to the leased asset. Often used for providers of IDCs, Lease Incentives, or other real estate expenses such as insurance. Must exactly match value on Companies Tab where Company Role Type = Vendor.
intercompany	Alphanumeric (150)	The name of the InterCompany role for the deal.
allocationPercent	Numeric	The percentage of the asset that is to be applied to the given cost center, GL Code and any customer allocation participants.
disposition	Alphanumeric	Default action to take on the asset at end-of-term. Valid values include ZeroBuyout or Evergreen
partialBuildingFlag	Y N	Real Estate related. Determines if leased property is for an entire building. This impacts the lease classification testing procedures such that a partial building does not have a FMV (no cost basis available) for purposes of the Substantially All Test (90% for ASC840). Required for Real Estate leases. Allowed for the following Product Categories only: Real Estate, Billboards, Buildings, Data Center, Land, Stadium Suite, Available for any custom real estate sub-categories requested by customers.

Detail	Type	Description
isSubLeased	Y N	Flag to identify if the lease is partially sub-let to another party (i.e. Lessee is acting as a lessor/landlord to another party). Required for Real Estate leases.

For each deal being loaded, you must provide a list of asset details as an Assets tag populated with a LineItem tag for each asset. For each line item, you can specify:

Detail	Type	Description
shipToId	Alphanumeric (150)	
shipToAddressId	Alphanumeric (150)	The unique address id of type ShipToAddress
productCategory	See Product Category list	Grouping of assets by type
externalId	Alphanumeric (64)	Used to identify parent/child relationships (if any) for a group of assets.
productNumber	Alphanumeric (64)	A unique identifier for equipment typically used to delineate the type of equipment in the manufacturer's product catalogue.
manufacturer	Alpha (200)	Company Name. This field may be used to identify the Real Estate Developer for a real estate lease.
description	Alphanumeric (1024)	Description of equipment or real estate which may include model year, make, lot number, parcel number, and other descriptors.
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.
project	Alphanumeric (150)	Project code asset is assigned for responsibility/management reporting. Required if part of General Ledger String.
glCode	Alphanumeric (128)	GL Coding Convention ruleset that maps to the series of account codes where accounting transactions are recorded for this asset. Must exactly match value set during GL Configuration in UI; Settings: Ledger Number: Set of Books Edit: GL Code (Coding Convention). Enter only if different than Lease Start Date
availableDate	Date (MM/DD/YYYY)	Date the asset becomes available for use by the Lessee. This date is used to define the effective dates for factors used in lease classification.
depreciationStartDate	Date (MM/DD/YYYY)	The date that assets should begin to depreciate. Enter only if different than Lease Start Date or Available for Use Date Note that the depreciationStartDate cannot precede the assetAvailableDate.

Detail	Type	Description
referenceNumber	Alphanumeric (150)	Free form field which may be used for any number of reference numbers desired. This is often used to store a PO number or other operational reference information.
quantity	Numeric (Total = 18, Precision = 2)	Number of units. Must be >0; If blank, system assumes 1
unitPrice	Numeric (Total = 18, Precision = 2)	Original equipment cost per unit in local currency. This is not an extended price; that will be calculated by LeaseAccelerator. Must be >0
observablePrice	Numeric (Total = 18, Precision = 2)	The price at which the Lessee would purchase the lease or non-lease component separately. The relative percent for each component is used to allocate the total consideration of lease payments to each component for accounting purposes. If the observable standalone prices are not readily available, the Lessee shall estimate the standalone prices, maximizing the use of observable information. If observable price is entered for one asset, it should be entered for all assets, even if the observable price is the same as the unit price. The accounting standards prescribe the use of the SOP. This field should be entered if the explicit SOP or an estimate is used. However, LeaseAccelerator does not REQUIRE the field since the system has default rules-based estimates. Must be > 0
unitRent	Numeric (Total = 18, Precision = 2)	A specific rental or payment amount defined in the lease agreement for the specific asset or lease component. If the standalone observable price is not provided, this amount will be used as the estimate for allocating the total payments to each individual component and/or asset (if provided). If unit rent is specified for one asset, it must be specified for all assets on schedule. The accounting standards prescribe the use of the SOP. This field should be entered if the explicit SOP or an estimate is used. However, LeaseAccelerator does not REQUIRE the field since the system has default rules-based estimates. Must be > 0
serialNumber	Alphanumeric (64)	Unique identifier for each asset.
assetTag	Alphanumeric (64)	A field available to customers to group assets. Typically, the asset tag assigned by your physical asset management (PAM) or IT asset management (ITAM) team and. This may serve as a linking ID for reference to an external PAM or ITAM ssystem. This attribute is not used by LeaseAccelerator beyond reporting, andreporting and may be repurposed.

Detail	Type	Description
comments	Alphanumeric (2500)	Free form field for user comments
assetOwner	Alphanumeric (150)	Name or employee responsible from organization/fiduciary perspective. Must exactly match value on People Tab where People Role Type = Asset Owner.
assetOwnerId	Numeric	The LeaseAccelerator internal Id of the Asset Owner for the asset.
assetUser	Alphanumeric (150)	Name of employee with custodial responsibility. Must exactly match value on People Tab where Person Role Type = Asset User.
assetUserId	Numeric	The LeaseAccelerator internal Id of the Asset User for the asset.
addressId	Integer	The unique address ID used by LeaseAccelerator to identify the address at which the asset(s) is currently located.
shipToAddressId	Integer	The unique address ID used by LeaseAccelerator to identify the address at which the asset(s) is currently located.
shipToCompany	Alphanumeric (150)	This must be the individual location name where the asset is physically located.
shipToAddressLine1	Alphanumeric (250)	Mailing address line 1 of ShipTo Company.
shipToAddressLine2	Alphanumeric (250)	Mailing address line 2 of ShipTo Company.
shipToCity	Alphanumeric (100)	Mailing address City of ShipTo Company.
shipToStateProvince	Alphanumeric (32) See Country and Province List	Mailing address State of ShipTo Company. (May be Province where appropriate) See Country Province List in Valid Values Glossary.
shipToPostalCode	Alphanumeric (16)	Mailing address Postal Code of ShipTo Company.
shipToCountry	See Validation List	Mailing address State of ShipTo Company. (May be Province where appropriate) See Country Province List in Valid Values Glossary.
shipToKey	Alphanumeric (100)	Customer code (Facility Code) which may be used instead of any of the ShipTo fields. Code must exist in system already, having been configured with an Address Bulk Import from the CIW.
macAddress	Alphanumeric (32)	Description field often used for IT-related equipment. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
ipAddress	Alphanumeric (32)	Description field used for identifying the Internet Points of Presence (POPs). This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.

Detail	Type	Description
commonName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
fullyQualifiedName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
serviceState	Alphanumeric (128)	A description field often used by customers to define the work state of an asset. Examples may include: Out for Repair, Under Construction, In Service. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.

Information about the financing terms of the transaction must also be included as a Terms tag:

Detail	Type	Description
leaseType	FMV, FinLse-FixPO, FinLse-Put, First Amend, Full-Service, Gross, Lev-Debt, Lev-Equity, Loan/NSA, Municipal, Split-TRAC, Synthetic, TRAC, Triple-Net	Type of contractual agreement. FMV and FinLse-Put (also known as “$1 Out”) are the most commonly used structures.
duration	Numeric (4)	Number of payments between commencement and original end of term. (Examples: 3-year lease paid monthly, Duration is 36. 3-year lease paid quarterly, Duration is 12.) Must be positive number
paymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	Periodic nature of payments. If the lease uses a step payment schedule with multiple payment frequencies, specify Monthly here.
repaymentMode	Advance Arrears	Specifies whether payments will be made at the beginning of the period or at the end of the period.

Detail	Type	Description
paymentBasis	LRF Fixed Floating	Indicates whether the lease pricing is quoted in terms of a Lease Rate Factor (LRF), a Fixed Interest Rate (Fixed), or a Floating Interest Rate (Floating). If the paymentBasis is specified as an LRF, a Lrf must be specified. If the paymentBasis is specified as a Fixed rate, the interestRate must be specified, along with an optional residualAmount. If the paymentBasis is specified as a Floating rate, the floatingRateBasis, spreadOverBasis, benchmarkDate, and adjustmentFrequency must all be specified, along with an optional residualAmount.
lrf	Numeric (Total = 18, Precision = 12) Expressed as a decimal x.xxxxx	Lease Rate Factor. Numeric factor expressed as a decimal used to calculate a payment, renewal or buyout amount by multiplying against the Original Equipment Cost. Required if Payment not specified. Note that the blendedLrf times the aggregate extended price (quantity * unitPrice) of the specified line items must match the periodicPayment (if both blendedLrf and periodicPayment are specified) or the request will be rejected with an error. Should be specified only if paymentBasis is LRF.

Detail	Type	Description
fiir	Numeric (Total = 18, Precision = 12) Expressed as a decimal x.xxxxx	Funder Implicit Interest Rate, which is not ordinarily known by the Lessee. Enter as a number (i.e. 5% not 0.05). Note that the payment calculated by applying the interestRate to the aggregate extended price (quantity * unitPrice) of the specified line items, less any specified residualAmount, must match the periodicPayment (if both interestRate and periodicPayment are specified) or the request will be rejected with an error. Should be specified only if paymentBasis is Fixed.
residualPercent	Number	Specifies the residual value, expressed as a percentage of asset value for tangible (hard cost) assets, excluded by the lessor in calculating the periodic payment. Should be specified only if paymentBasis is Fixed or Floating. Defaults to zero if not specified and paymentBasis is Fixed or Floating.
indexDescription	See Index Basis List	The publicly reported interest rate on which the Floating rate is based. Should be specified only if paymentBasis is Floating.

Detail	Type	Description
spread	Numeric (Total = 8, Precision = 6)	The increment which is added/subtracted to the index to determine the lease's specific rate. For example, the lease is based on CPI + 1%, where 1% is the spread over index. Enter as a number (i.e. 5% not 0.05) Note that the payment calculated by applying the uplifted basis rate as of the specified benchmarkDate to the aggregate extended price (quantity * unitPrice) of the specified line items, less any specified residualAmount, must match the periodicPayment (if both interestRate and periodicPayment are specified) or the request will be rejected with an error. Should be specified only if paymentBasis is Floating.
benchmarkDate	Date (MM/DD/YYYY)	The date that the initial floating rate is based on. This serves as the base index by which changes are measured from. Required if Floating Rate Lease. Should be specified only if paymentBasis is Floating.
adjustmentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	How often the index basis is measured for change. Required if Floating Rate Lease . Should be specified only if paymentBasis is Floating.
rentEscalationCap	Numeric (Total = 18, Precision = 2)	Maximum increase that a rental payment may increase for a single measurement if floating rate lease. Number >= 0 or Null (if None). Should be specified only if paymentBasis is Floating.

Detail	Type	Description
downPayment	Number	Initial Payment Amount - First payment amount from which escalation caps are applied. Amount, if any, in addition to the base rent. May be Required where Expense Type = CAMS or Other Related Expense and Lease Type = Gross Lease, Triple-Net, or Full Service. Number >
interimRentType	Exempt, Accrue and Pay at Commencement, Accrue and Add to Amount Financed at Commencement	Type of Interim Rent which denotes how and when to apply the rent to the payment schedule. Specifies whether the lease does not have interim rent (EXEMPT), accrues interim rent which is payable on the first day of the lease (Accrue and Pay at Commencement), or accrues interim rent that is then rolled into the financed amount (Accrue and Add to Amount Financed at Commencement).

Detail	Type	Description
interimRentBasis	Fixed Floating Same Amount	The basis for the rent charge. Specifies whether interim rent will be calculated based on a fixed interest rate (Fixed), based on a rate that floats proportionate to the base lease terms based on changes in a publicly reported interest rate (Floating), based on a pro rata daily charge equal to the monthly rent throughout the term of the lease (Same), or based on a fixed amount already determined (Amount). If Fixed is specified, then either interimRate or interimLRF must be specified. If Floating is specified, then interimIndexType must be specified. If Amount is specified, then interimRent must be specified. Should be specified only if interimRentType is not EXEMPT.
interimRate	Numeric (Total = 18, Precision = 12)	The interest rate benchmark if Interim Rent Basis = Floating. Also required for Fixed. Number >0.
interimSpread	Numeric (Total = 18, Precision = 12)	An increment/decrement to the Interim Rate to determine the final Interim Rent. Number; may be positive or negative.
interimIndexType	See Interim Index Type list	The public index to which the interim floating rate is tied. Should be specified only if interimRentBasis is Floating and interimRentType is not EXEMPT.
interimRent	Numeric (Total = 18, Precision = 2)	Amount of Interim Rent payment. Number >0. May be blank if Interim LRF is defined to calculate payment amount. Specify only if interimRentBasis is Amount and interimRentType is not EXEMPT.

Detail	Type	Description
interimLRF	Numeric (Total = 18, Precision = 12)	Lease Rate Factor applied to OEC to calculate the Interim Rent if not specified. Number >0. May be blank if Interim Rent Amount is specified Should be specified only if interimRentBasis is Fixed and interimRentType is not EXEMPT.
paymentAmount	Numeric (Total = 18, Precision = 12)	Amount of Payment. Number >0. Note that this must match the calculated amount based on the specified paymentBasis and associated attributes.
reasonableCertainHoldingPeriod	Numeric (4)	Number of months that the assets contained in the lease are expected to be used. This may be shorter than Duration if assets are typically bought out early or may be longer than duration if renewal periods are typically exercised or evergreen is typically incurred. Must be a positive number and must be number of months regardless of Frequency.
estimatedGRV	Numeric (Total = 18, Precision = 2)	The amount expected to be paid by Lessee to Lessor at end of lease because equipment FMV is less than contractual guaranteed residual. Number >= 0 or Null (if None).

As part of the financing terms, any available mid-term/end-of-term options may be specified, each in an Option tag:

Detail	Type	Description
optionType	Buyout Renewal Return	The type of option.
optionTiming	Mid-Term EOT	Indicates whether the option is exercisable at a specific point in time (Mid-Term) or if the option is exercisable at end of term (EOT), even if that date changes as a result of a Renewal event.

Detail	Type	Description
reasonablyCertain	Y N	Should be set to Y if this is the option which is reasonably certain to be exercised at end of term.
monthNumber	Integer	Specifies the month number in which the option may be exercised. For Renewal options, this should be the first month number after the end of term, e.g.,37 for a three-year lease. If optionTiming is specified as Mid-Term, then monthExercisable must be specified.
notificationRequired	Y N	Indicates whether or not the lessee must provide notice to the lessor in order to exercise the option. If notificationRequired is N, the option will exercise automatically at end of term. Note that only one option may have notificationRequired set to N. If not specified, notificationRequired defaults to Y.
minDaysNotice	Integer	The minimum advance notice in days that a lessee must provide to the lessor before they can exercise the option. If specified, notificationRequired will be treated as Y for the option, regardless of what is specified.
maxDaysNotice	Integer	The maximum advance notice in days that a lessee may provide to the lessor that they intend to exercise the option. If specified, notificationRequired will be treated as Y for the option, regardless of what is specified.
exercisableByLessee	Y N	Indicates whether this option is exercised at the discretion of the Lessee (Y) or the Lessor (N). If not specified, defaults to Y.
purchasePrice	Number	The prenegotiated price for a Buyout option. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified purchasePrice. If purchasePrice is not specified for a Buyout option, it is assumed to be an FMV Buyout, with purchase price to be determined at the time of exercise. This tag should not be specified unless optionType is Buyout.
minimumBuyout	Number	The minimum price for a Buyout option. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified minimumPurchasePrice. This tag should not be specified unless optionType is Buyout.
buyoutCap	Number	The maximum price for a Buyout option, also known as a Buyout cap. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified maximumPurchasePrice. This tag should not be specified unless optionType is Buyout.
renewalTerm	Integer	The number of months to which the lessee commits to renew the assets at the specified renewalPayment, if the option is exercised.

Detail	Type	Description
renewalPayment	Number	The prenegotiated periodic payment for a Renewal option. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified renewalPayment. If renewalPayment is not specified for a Renewal option, it is assumed to be an FMV Renewal, with renewal payment to be determined at the time of exercise. This tag should not be specified unless optionType is Renewal.
renewalPaymentLRF	Number	Specifies the lease rate factor used to calculate the renewal payment at the time of renewal, e.g.,0.025.
utilityPayment	Number	For utilization-based renewal options, specifies the price per unit used to calculate the renewal payment at the time of renewal, e.g.,$8/sf.
utilityUnits	Acres Square Feet Square Meters	Specifies the utilization unit used to price the renewal. This renewal option will be applicable only to assets for which utilization-based pricing is specified, and where the pricing is based on the matching utilization unit type.
minimumPayment	Number	The minimum periodic payment for a Renewal option. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified minimumRenewalPayment. This tag should not be specified unless optionType is Renewal.
renewalCap	Number	The maximum periodic payment for a Renewal option, also known as a Renewal cap. May be specified as a fixed amount (e.g.,5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified maximumRenewalPayment. This tag should not be specified unless optionType is Renewal.
returnFee	Number	A prenegotiated fee associated with a Return option, often for early returns. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified returnFee. If returnFee is not specified for a Return option, no return fee is assumed to apply. This tag should not be specified unless optionType is Return.
feeLimit	Number	The maximum fee associated with a Return option, also known as a Limit. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g.,12.5%); the percent sign is used to interpret the specified maximumReturnFee. This tag should not be specified unless optionType is Return.
lessSaleProceeds	Y N	Indicates whether the returnFee will be reduced by the proceeds, if any, from the sale of the asset by the lessor subsequent to returning the asset.

Detail	Type	Description
comments	Text	A free-form text block of additional comments or other contractual clauses associated with the option.

If the payment schedule features uneven rentals not wholly attributable to a floating interest rate, the payment schedule should be defined explicitly using a StepPaymentSchedule:

Detail	Type	Description
startingPayment	Integer	The month in which this step begins. The first monthNumber is 1.
numPayments	Integer	The number of consecutive payment periods, starting from monthNumber, during which the same payment amount will be due on the same payment frequency. Note that the StepPaymentSchedule should define enough Steps to cover the entire lease, and each month within the lease term should be associated with exactly one Step. Steps may not overlap.
paymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	The frequency with which payments will be made in this step.
amount	Number	The amount to be paid for each payment period in this step.

If the deal has related expenses which are known in advance, either by date or scheduled periodicity, those may be specified as ScheduledExpenses, with each distinct expense in a separate ScheduledExpense tag:

Detail	Type	Description
expenseType	See list	Specifies the type of related expense for accounting purposes.
expenseSubtype	See list	Describes more specifically the type of related expense, within the specified expense type grouping.
paymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual One-Time	The frequency with which the expense recurs. If this is a one-time expense, e.g.,a security deposit, One-Time should be specified.
relatedAssetType	See list	If the expense is only applicable to a certain type of assets (e.g.,Custodial fees may apply only to Building assets), the asset type may be specified here to limit the allocation of expense to those assets of the specified type.
payee	Text	The company name to whom the expense will be remitted.

Detail	Type	Description
benchmarkPaymentAmount	Number	A benchmark amount for comparison purposes. This amount is not used for any calculations other than to display onscreen the percentage variance from the benchmarkPaymentAmount as actual amounts are invoiced and/or paid.
escalationCap	Number	The maximum amount, expressed as a percentage, by which the expense amount may increase from period to period. Ignored if paymentFrequency is One-Time.
paymentCeiling	Number	The maximum amount which may be billed for this expense in any given period.
scheduledPaymentDate	Date	The scheduled date, if known, for the next (or only) payment of this type of expense.
scheduledPaymentAmount	Number	The amount, if known, to be paid per period or as a one-time expense.
interestBearingFlag	Y N	For Security Deposits and Special Deposits, indicates if the deposit will earn interest between the time the deposit is paid and when it is refunded. For Late Fees, indicates if the Late Fee is calculated by applying an interest rate.
interestRate	Number	For Security Deposits and Special Deposits, indicates the rate at which interest is earned on the deposit. For Late Fees, indicates the interest rate used to calculate the amount of the late fee. In either case, this value is expressed as a percentage, e.g.,2%.

When using ImportDeals to capture historical transactions, you may also wish to capture a history of invoiced and/or paid related expenses. These can be captured as InvoicedExpenses and PaidExpenses. InvoicedExpense and PaidExpense tags are nearly identical, and are combined in the table below for simplicity. Note that PaidExpense tags include the ability to capture associated invoice information, so InviocedExpense tags are typically needed only for unpaid invoices.

Detail	Type	Description
dealId	Integer	The deal id for which payment adjustment needs to be performed
artifactNumber	Alphanumeric (100)	Artifact number or the schedule number of the portfolio which needs to be imported
effectiveDate	Date	The date from which the payment needs to be adjusted
remeasurementDate	Date	The date at which a remeasurement is required for adjustment
amount	Alphanumeric (100)	The amount which needs to be adjusted or needs to be updated
reason	Alphanumeric (100)	The predefined reason for the payment adjustment
timing	Alphanumeric (150)	Timings for the payment adjustment. Either one time or recurring.
comments	Alphanumeric (150)	User comments

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import and Classify Deals

Operation: ImportantClassifyDeals

This method is identical to Import Deals EXCEPT that is also engages the automated LA Classification Engine in addition to providing a mechanism for importing specific information about each lease schedule and asset within your lease portfolio into LeaseAccelerator, in a single operation, with all information populated.

The Lease Classification Engine uses Policy Thresholds as parameters for specific tests as outlined in the accounting standards. These thresholds are important in that they allow customers to define quantitative metrics to use where the accounting standards allow for judgment, but also require consistency in the actual application of the thresholds through the organization. The key judgments in the Lease Classification Process are:

- What lease term constitutes the majority of the economic life? (ASC 840 prescribes 75%)
- What % of the PV of Lease Payments versus FMV constitutes substantially all of the Fair Market Value? (ASC840 prescribes 90%)
- What % of the PV of total cash stream of all payments including the Buyout Option defines when a Bargain exists. (ASC840) This is an economic metric to standardize the evaluation across any contract structure for the same type of asset. For example, a contract may have very low recurring payments but a higher balloon payment to Purchase the asset. Another contract may have high recurring payments with a very low buyout payment. Each may constitute a “bargain” to purchase the asset but a common metric must be used to evaluate the overall economic incentive to buy the asset, not just the nominal buyout price. LeaseAccelerator measures this using the PV of the total payment stream.
- What % of the PV of total cash stream of all payments including the Buyout Option defines when it is reasonably certain that the Buyout or Purchase Option will be exercised. (ASC842)

Request: Request XML and field descriptions are identical to ImportDeals. No changes are needed.

Import Disbursements

Operation: ImportDisbursements

```
Request:    <Payload>
    <DisbursementData>
        <Disbursement>
            <ID>postingId</ID>
            <DatePaid>paymentDate</DatePaid>
            <Currency>currency</Currency>
            <Amount>paymentAmount</Amount>
             <ReferenceNumber>referenceNumber</ReferenceNumber>
            <PaymentReferenceId>paymentReferenceId</PaymentReferenceId>
            <PONumber>poNumber</PONumber>
       <LessorReferenceNumber>lessorReferenceNumber</LessorReferenceNumber>
        </Disbursement>
        …
    </DisbursementData>
</Payload>
```

The Payload for an ImportDisbursements request consists of one or more Disbursement tags, each of which identifies an actual disbursement to be captured in the LeaseAccelerator subledger:

Detail	Type	Description
postingId	Integer	Posting ID of the Payment in the source system. For example: Check Number, Wire Transfer Number, or ACH Number. The unique transaction ID used by the ERP to identify this payment. If the postingId has already been seen in LeaseAccelerator, but for a different amount, processing will depend on the WarningPolicy for the Request. If the WarningPolicy is Ignore, the existing entry will be adjusted or, if the existing entry has been locked by Month-End Close, an adjusting entry will be created. If the WarningPolicy is Stop or Skip, the Disbursement will be ignored, and a warning will be returned as part of the Response payload.
paymentDate	Date (MM/DD/YYYY)	The date the payment was made.
Currency	See list	The currency in which the payment was made.

Detail	Type	Description
paymentAmount	Numeric (Total = 18, Precision = 2)	The amount of the payment.
referenceNumber	Text	Often Vendor Invoice# from external system.
paymentReferenceID	Alphanumeric (32)	This value should be the “ledgerentryid” identifier specified during the export of the payment export to the Accounts Payable module. In order for LeaseAccelerator to properly link the actual disbursement back to the original expected payment(s), this reference ID must be specified. Note that multiple PaymentReferenceId tags may be specified for a single Disbursement.
poNumber	Alphanumeric (256)	Internal Reference number can be used to match payment made in Accounts Payable system to the original expected payment in Lease Accelerator. This must match the number for the Purchase Order for the deal in LA. This can be used instead of paymentReferenceID. API will error if both paymentReferenceID and poNumber fields are populated.
lessorReferenceNumber	Alphanumeric (256)	Internal Reference number that can be used in conjunction with PONumber to help match payment made in Accounts Payable system to the original expected payment in Lease Accelerator.

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Exchange Rates/FX Rates

Operation: ImportExchangeRates

```
Request:    <Payload>
              <Rate>
                    <FromCurrency>fromCurrency</FromCurrency>
```

```
                    <ToCurrency>toCurrency</ToCurrency>
                    <EffectiveDate>effectivedate</EffectiveDate>
                    <Rate>rate</Rate>
                    <Source>source</Source>
                    <RateType>ratetype</RateType>
                </Rate>
            </Payload>
```

The Rate operation is used to communicate foreign exchange rates to Lease Accelerator. FX (or Currency Translation Factors) are published indices used to convert financial data from one currency to another. These factors are critical to accounting, reporting, and marketplace functions so that accurate comparisons can be made between Geos (countries).

Detail	Type	Description
fromCurrency	See currency list below	Name of local currency.
toCurrency	See currency list below	Name of currency translation for accounting or reporting purposes.
effectiveDate	Date (MM/DD/YYYY)	Date which the multiplier is active (as of the beginning of the day).
rate	Numeric - (18 total, precision = 12)	Factor to multiply the From Currency against to arrive at the To Currency. Multipliers are published indices.
source	Alphanumeric (1024)	The source of the currency translation factor.
rateType	Text	Type of Rate being imported, either Spot or Weighted Average

```
Response:    <Payload>
            <ImportResults>
                <severity>severity</severity>
                <message>message</message>
            </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Invoiced Expenses

Operation: ImportInvoicedExpenses

This operation enables a customer to import the actual paid amounts for Other Related Expenses, which are approved for payment and sent to Accounts Payable. Based on the lease type, these invoiced amounts may generate accounting entries to record expense adjustments. Accounting entries for this tab are based on the specific expense type; for items such as CAMS, the journal entries will reverse the expense accruals created from the Invoiced Related Expense tab (if matched based on Invoice Number and Invoice Date) and record the expense recognition based on the amount approved for payment.

Please note that the accounting treatment for ARO and End of Life is as follows: When Expense Type is ARO-End of Life, please note that for SubTypes of Equipment-Refurbishment and Real Estate - Return to Original Condition, LA will generate Asset Retirement Obligations (ARO) accounting. For SubType of Cost to Dismantle or Remove (per Agreement), LA will generate End of Life Accounting which is added to the Payment Schedule.

```
Request:    <Payload>
              <InvoicedExpenses>
                     <DealId>dealId</DealId>
                     <ArtifactNumber>artifactNumber</ArtifactNumber>
                     <InvoicedExpense>
                            <ProductCategory>productCategory</ProductCategory>
                            <ExpenseType>expenseType</ExpenseType>
                            <ExpenseSubtype>expenseSubtype</ExpenseSubtype>
                            <Payee>payee</Payee>
                            <Description>description</Description>
                            <ServicePeriodStart>servicePeriodStart
</ServicePeriodStart>
                            <ServicePeriodEnd>servicePeriodEnd
</ServicePeriodEnd>
                            <InvoiceAmount>invoiceAmount</InvoiceAmount>
                            <Currency>currency</Currency>
                            <InvoiceDate>invoiceDate</InvoiceDate>
                            <InvoiceNumber>invoiceNumber</InvoiceNumber>
                            <PaymentType>paymentType</PaymentType>
                     </InvoicedExpense>
                     …
              </InvoicedExpenses>
              …
       </Payload>
```

The ImportInvoicedExpenses operation provides a mechanism for loading invoiced expenses as a batch. For each deal for which invoices need to be loaded, an InvoicedExpenses tag identifies the related deal, and a set of InvoicedExpense tags identify the details of each invoice:

Detail	Type	Description
dealId	Integer	The unique ID used by LeaseAccelerator to identify a deal.
artifactNumber	Alphanumeric (256)	The identifying number associated with a document in the deal being updated. Note that either dealId or artifactNumber must be specified in the request, but only one is required. If dealId is specified, artifactNumber will be ignored.
productCategory	See Product Category list	Grouping of Assets by type
expenseType	See list	A type of related expense specified in the contract as the responsibility of the Lessee. Payment may be made to the Lessor/Landlord or directly to the Vendor.
expenseSubtype	See list	A grouping of expenses within a category by function.
payee	Alphanumeric (150)	A company providing services related to the leased asset. Often used for providers of IDCs, Lease Incentives, or other real estate expenses such as insurance. Must exactly match value on Companies Tab where Company Role Type = Vendor
description	Alphanumeric (250)	Description of Expense
servicePeriodStart	Date (MM/DD/YYYY)	Beginning date for which services were provided for the expense. By Expense/Sub-Expense Type
servicePeriodEnd	Date (MM/DD/YYYY)	Ending date for which services were provided for the expense. By Expense/Sub-Expense Type
invoiceAmount	Numeric (Total = 18, Precision = 2)	Amount of Expense. Number >0
currency	See list	Currency associated with Invoiced Amount
invoiceDate	Date (MM/DD/YYYY)	Invoice Date per Vendor Invoice Artifact
invoiceNumber	Alphanumeric (32)	Reference Number assigned by Vendor
paymentType	Payment Refund	Flag to define if expense is a payment or refund

```
Response:    <Payload>
       <ImportResults>
              <severity>severity</severity>
              <message>message</message>
       </ImportResults>
       …
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Lessee Rates

Operation: ImportLesseeRates

The ImportLesseeRates allows the loading of rates into LeaseAccelerator of type IBR, Equity or Debt.

```
Request:    <Payload>
              <LesseeRates>
                    <LesseeRate>
                          <Lessee>lessee</Lessee>
                          <Geo>geo</Geo>
                          <Term>term</Term>
                          <RateType>rateType</RateType>
                          <Rate>rate</Rate>
                          <EffectiveDate>effectiveDate</EffectiveDate>
                    </LesseeRate>
                    …
              </LesseeRates>
       </Payload>
```

The ImportInvoicedExpenses operation provides a mechanism for loading invoiced expenses as a batch. For each deal for which invoices need to be loaded, an InvoicedExpenses tag identifies the related deal, and a set of InvoicedExpense tags identify the details of each invoice:

Detail	Type	Description
lessee	Alphanumeric (256)	The legal party to the agreement leasing the equipment or renting the real estate. Real estate leases may refer to this as the Tenant. Must exactly match a Lessee listed on the Companies Tab with the Company Role Type = Lessee.
geo	See Country List	Country Name that governs the accounting and tax rules for a transaction.
term	Integer	The number of months the rate is applicable.
rateType	IBR, Equity or Debt	The type of rate specified.
rate	Numeric	The actual numeric rate to be imported.
effectiveDate	Date (MM/DD/YYYY)	The date on which the specified rate is effective.

```
Response:    <Payload>
              <ImportResults>
                     <severity>severity</severity>
                     <message>message</message>
              </ImportResults>
              …
       </Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Paid Expenses

Operation: ImportPaidExpenses

This method may be used to import the actual paid amounts for Other Related Expenses, which are approved for payment and sent to Accounts Payable. This method is similar to the functionality when using the “Paid Related Expenses tab” on the PIW.

Based on the lease type, these invoiced amounts may generate accounting entries to record expense adjustments. Accounting entries for this tab are based on the specific expense type; for items such as CAMS, the journal entries will reverse the expense accruals created from the Invoiced Related Expense tab (if matched based on Invoice Number and Invoice Date) and record the expense recognition based on the amount approved for payment.

Please note that the accounting treatment for ARO and End of Life is as follows: When Expense Type is ARO-End of Life, please note that for SubTypes of Equipment-Refurbishment and Real Estate - Return to Original Condition, LA will generate Asset Retirement Obligations (ARO) accounting. For SubType of Cost to Dismantle or Remove (per Agreement), LA will generate End of Life Accounting which is added to the Payment Schedule.

```
Request:    <Payload>
<PaidExpenses>
       <DealId>dealId</DealId>
       <ArtifactNumber>artifactNumber</ArtifactNumber>
       <PaidExpense>
              <ProductCategory>productCategory</ProductCategory>
              <ExpenseType>expenseType</ExpenseType>
              <ExpenseSubtype>expenseSubtype</ExpenseSubtype>
              <Payee>payee</Payee>
              <Description>description</Description>
              <ServicePeriodStart>servicePeriodStart</ServicePeriodStart>
```

```
            <ServicePeriodEnd>servicePeriodEnd</ServicePeriodEnd>
            <AmountPaid>paymentAmount</AmountPaid>
            <Currency>currency</Currency>
            <PaymentDate>paymentDate</PaymentDate>
            <PaymentRefNum>paymentrefnum</PaymentRefNum
            <InvoiceDate>invoiceDate</InvoiceDate>
            <InvoiceNumber>invoiceNumber</InvoiceNumber>
            <PaymentType>paymentType</PaymentType>
      </PaidExpense>
                …
</PaidExpenses>
…
</Payload>
```

For each deal for which payments need to be loaded, a PaidExpenses tag identifies the related deal, and a set of PaidExpense tags identify the details of each paid expense:

Detail	Type	Description
dealId	Integer	The unique ID used by LeaseAccelerator to identify a deal.
artifactNumber	Alphanumeric (256)	The identifying number associated with a document in the deal being updated. Note that either dealId or artifactNumber must be specified in the request, but only one is required. If dealId is specified, artifactNumber will be ignored.
productCategory	See Product Category list	Grouping of Assets by type
expenseType	See list	A type of related expense specified in the contract as the responsibility of the Lessee. Payment may be made to the Lessor/Landlord or directly to the Vendor.
expenseSubtype	See list	A grouping of expenses within a category by function.
payee	Alphanumeric (150)	A company providing services related to the leased asset. Often used for providers of IDCs, Lease Incentives, or other real estate expenses such as insurance. Must exactly match value on Companies Tab where Company Role Type = Vendor
description	Alphanumeric (250)	Description of Expense
servicePeriodStart	Date (MM/DD/YYYY)	Beginning date for which services were provided for the expense. By Expense/Sub-Expense Type
servicePeriodEnd	Date (MM/DD/YYYY)	Ending date for which services were provided for the expense. By Expense/Sub-Expense Type

Detail	Type	Description
paymentAmount	Numeric (Total = 18, Precision = 2)	Amount of Expense. Number >0
currency	See list	Currency associated with Amount Paid
paymentDate	Date (MM/DD/YYYY)	Date Paid or Received. Move to Paid Other Related
paymentRefNum	Alphanumeric (32)	Reference Number of the Payment. For example: Check Number, Wire Transfer Number, or ACH Number. Move to Paid Other Related
invoiceDate	Date (MM/DD/YYYY)	Invoice Date per Vendor Invoice Artifact.
invoiceNumber	Alphanumeric (32)	Reference Number assigned by Vendor
paymentType	Payment Refund	Flag to define if expense is a payment or refund

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import Payment Adjustments

Operation: ImportPaymentAdjustments

This method enables a customer to import new payment schedules during a lease term. This method is similar to the functionality when using the “Payment Adjustments” on the PIW.

Adjusted Payment schedules may be necessary for various reasons and are generally caused by activity outside the normal lease lifecycle or the determinations of the adjusted payments performed outside the system. Current defined business reasons are:

- Floating Rate Adjustment
- Contingent Rent specified in the original contract when an event specified in the lease (but not an option) has occurred and/or the contingency has been resolved

- Other, if the reason does not fall into the above. Renegotiated payments should not be entered as a Payment Adjustment as these are Modifications.

Payment Adjustment imports are NOT required for normal step payments or periodic escalations defined in the original lease document, where the change in rental payments is a specified amount or percentage and occurs with a specified periodicity (i.e., annual increases on the anniversary date). The Step Payment tab should be used in these circumstances.

Also, note that a new Payment Adjustment schedule will be input each time an adjustment occurs. The Payment Adjustment assumes a fixed payment at the input amount for the remaining lease term. The most recent Payment Adjustment will be used for any renewal periods. If the existing Payment Schedule is a Step Payment, then the % change from the current payment will be applied to each Step.

```
Request:    <Payload>
              <PaymentAdjustments>
                     <PaymentAdjustment>
                            <DealId>dealId</DealId>
                             <ArtifactNumber>artifactNumber</ArtifactNumber>
                            <EffectiveDate>effectiveDate</EffectiveDate>
                            <RemeasurementEffectiveDate>remeasurementDate
</RemeasurementEffectiveDate>
                            <Rate>rate</Rate>
                            <Amount>amount</Amount>
                            <Timing>timing</Timing>
                            <Reason>reason</Reason>
                            <Comments>comments</Comments>
                     </PaymentAdjustment>
                     …
              </PaymentAdjustments>
              …
       </Payload>
```

For each deal for which payment adjustments need to be loaded, a PaymentAdjustment tag identifies the related deal, and the details of the payment adjustment:

dealId	Integer	The unique ID used by LeaseAccelerator to identify a deal.
artifactNumber	Alphanumeric (256)	The identifying number associated with a document in the deal being updated. Note that either dealId or artifactNumber must be specified in the request, but only one is required. If dealId is specified, artifactNumber will be ignored.
effectiveDate	Date (MM/DD/YYYY)	Date that the new payment schedule is effective.

dealId	Integer	The unique ID used by LeaseAccelerator to identify a deal.
remeasurementDate	Date (MM/DD/YYYY)	The date at which a remeasurement is required for adjustment
rate	Numeric (Total = 18, Precision = 12)	The floating rate. Number >0; Enter the interest rate as a % (i.e. 3.2% not 0.032)
amount	Numeric (Total = 18, Precision = 2)	The new payment amount. Number >0
timing	One-Time Recurring	Defines whether the adjustment is applied to a single period or whether all future periods are adjusted.
reason	Underlying index rate changed Contingent rent resolved Other	The reason for the revised payment schedule.
comments	Alphanumeric (2500)	Customer input explanation

```
Response:    <Payload>
              <ImportResults>
                    <severity>severity</severity>
                    <message>message</message>
              </ImportResults>
              …
       </Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Import People

Operation: ImportPeople

This method may be used to add new people. This method is similar to the functionality when using the “People tab” on the CIW.

> **Note:** For Company addresses (i.e., the company tab on the CIW), use the Import Company method. For ShipTo addresses (i.e., the address tab on the CIW), use the ImportAddresses method.

Many people participate in your leasing program and have different roles. These people may or may not be users of the system. LeaseAccelerator captures these people so that they can receive notifications

or other information important to their function. Examples of the roles that people may play and therefore need to be configured in the system are:

- Asset Owners: Employees who have fiduciary responsibility for the maintenance and use of the assets. These employees are typically management level and are financially responsible for the equipment.

- Asset Users: Employees who have custodial responsibility for the leased assets. These employees may be management or staff level. These employees' work locations are typically at the equipment's physical location or in the same area.

- Order Administrators: Employees who have "procurement" responsibility for the leased assets, shepherding the administrative process in your organization to finance the acquisition of equipment and securing its delivery to the asset user.

- Analysts: Employees responsible for generating the Lease vs. Buy.

- Treasury Approvers: Employees typically responsible for approving the lease transaction and may be the responsible party signing the lease documents. These employees are typically management or executive level and are an escalation step for notifications regarding End-of-Term.

- Sourcing contacts: Employees responsible for initiating and creating an RFP, reviewing the Proposals and awarding to a Funder/Lessor.

  Please note that a person may be listed multiple times if their role types are different, but the company and address information for that person must be identical. Do not list a person multiple times with the same role type and different companies. This tab is used to create a record for that person and as such they can only have one Company associated with them, along with one address.

```
Request:    <Payload>
            <People>
                  <Person>
                        <FullName>fullName</FullName>
                        <PersonRoleType>personRoleType</PersonRoleType>
                        <CompanyName>companyName</CompanyName>
                        <AddressLine1>addressLine1</AddressLine1>
                        <AddressLine2>addressLine2</AddressLine2>
                        <City>city</City>
                        <StateProvince>stateProvince</StateProvince>
                        <Country>country</Country>
                        <PostalCode>postalCode</PostalCode>
```

```
                        <Phone>phone</Phone>
                        <Email>email</Email>
                        <IsUser>isUser</IsUser>
                        <IsSSOUser>isSSOUser</IsSSOUser>
                        <ExternalUID>externalUID</ExternalUID>
                </Person>
        </People>
        …
</Payload>
```

For each person being added, you can specify a Person element with the following attributes:

Detail	Type	Description
fullName	Alphanumeric (150)	First name, Last name
personRoleType	Analyst, AssetOwner, AssetUser, FinanceApprover, OrderAdministrator, Sourcing	The function that a person plays within your leasing program.
companyName	Alphanumeric (150)	Employee's Entity or Business Unit (typically governed by your company's internal method to commonly reference the organization that an employee is part of). Must exactly match a value for the Company where Company Role Type = Lessee, Entity, Funder, Vendor, or BU.
addressLine1	Alphanumeric (250)	Street Address. If blank, data from corresponding Company Name on Companies Tab will be applied.
addressLine2	Alphanumeric (250)	Additional address information such as floor or suite. If blank, data from corresponding Company Name on Companies Tab will be applied.
city	Alphanumeric (100)	City used by postal service. This may not be the more common name used in conversation. If blank, data from corresponding Company Name on Companies Tab will be applied. Required for LeaseAccelerator Users. Defined on LA Users Tab.
stateProvince	Alphanumeric (32) See Country Province List	Postal Abbreviation for acceptable Countries. If blank, data from corresponding Company Name on Companies Tab will be applied.

Detail	Type	Description
country	See Country List	The country component of the address. If blank, data from corresponding Company Name on Companies Tab will be applied. Required for LeaseAccelerator Users. Defined on LA Users Tab.
postalCode	Alphanumeric (16)	The postal/zip code of the address. If blank, data from corresponding Company Name on Companies Tab will be applied.
phone	Numeric (32)	Telephone number
email	Alphanumeric (150)	Email address for POC - Valid Format contains @xxx
isUser	Yes or No	Field to define whether this person is a defined user within LA. By selecting Yes, this person will be provisioned as a user upon import and their user name will be everything before the @ sign of their email address.
isSSOUser	Yes or No	Field to define if user will be created as an SSO user and therefore will not be able to login through LA User Interface but will be able to access the system through custom application (SSO Console)
ExternalUID	Alphanumeric (150)	Unique ID used to authenticate the SSO user. (Typically the email ID but can be anything.) If value of “Is SSO User” field is “Yes”, then this field must be populated.

```
Response:    <Payload>
             <ImportResults>
                 <severity>severity</severity>
                 <message>message</message>
             </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Modify Deal Import

Operation: ModifyDealImport

This method provides a mechanism for modifying a lease schedule in a single operation.

Note: This method does NOT run Lease Classification Engine. Please see Import and Classify Deals for invoking this process.

```
Request:    <Payload>
            <ModifyDeal>
                <ScheduleNumber>scheduleNumber</ScheduleNumber>
                <LeaseType>leaseType</LeaseType>
                <Frequency>frequency</Frequency>
                <RepaymentMode>repaymentMode</RepaymentMode>
                <Duration>duration</Duration>
                <PaymentBasis>paymentBasis</PaymentBasis>
                <DownPayment>downPayment</DownPayment>
              <LRF>lrf</LRF>
             <FunderPricedFutureValueOfResidual>
funderPricedFutureValueOfResidual</FunderPricedFutureValueOfResidual>
                <InterestRate>interestRate</InterestRate>
                <Payment>payment</Payment>
                <SpreadOverIndex>spreadOverIndex</SpreadOverIndex>
                <IndexBasis>indexBasis</IndexBasis>
                <BenchmarkDateForIndexedRates>benchmarkDateForIndexedRates
</BenchmarkDateForIndexedRates>
                <RentEscalationCap>rentEscalationCap</RentEscalationCap>
                <AdjustmentFrequency>adjustmentFrequency
</AdjustmentFrequency>
                <AccountingClassification>accountingClassification
</AccountingClassification>
                <OverrideExplanation>overrideExplanation
</OverrideExplanation>
                <ModificationSummary>
             <IBR>ibr</IBR>
             <ReasonablyCertainHoldingPeriod>reasonablyCertainHoldingPeriod
</ReasonablyCertainHoldingPeriod>
             <EstimatedGuaranteedResidualValue>
estimatedGuaranteedResidualValue</EstimatedGuaranteedResidualValue>
             <Comments>comments</Comments>
             <ModificationDate>modificationDate</ModificationDate>
             <AssetAvailableDate>assetAvailableDate</AssetAvailableDate>
             <CommensurateAdjustment>commensurateAdjustment
</CommensurateAdjustment>
             <RemeasureROUBasis>remeasureROUBasis</RemeasureROUBasis>
                </ModificationSummary>
```

```
                <InterimRent>
                    <InterimRentType>interimRentType</InterimRentType>
                    <InterimRentBasis>interimRentBasis</InterimRentBasis>
                    <InterimRate>interimRate</InterimRate>
                    <InterimSpread>interimSpread</InterimSpread>
                    <InterimIndexType>interimIndexType</InterimIndexType>
                    <InterimRentAmount>interimRentAmount</InterimRentAmount>
                </InterimRent>
                <EOTOptions>
                    <Option>
                        <Timing>timing</Timing>
                        <OptionType>optionType</OptionType>
                        <ReasonablyCertain>reasonablyCertain
</ReasonablyCertain>
                        <EffectiveMonth>effectiveMonth</EffectiveMonth>
                        <MinDaysNotice>minDaysNotice</MinDaysNotice>
                        <MaxDaysNotice>maxDaysNotice</MaxDaysNotice>
                        <ExercisableByLessee>exercisableByLessee
</ExercisableByLessee>
                        <Description>description</Description>
                        <PurchaseAmount>purchasePrice</PurchaseAmount>
                        <BuyoutCeiling>buyoutCeiling</BuyoutCeiling>
                        <BuyoutFloor>buyoutFloor</BuyoutFloor>
                        <RenewalTerm>renewalTerm</RenewalTerm>
                        <RenewalPayment>renewalPayment</RenewalPayment>
                        <RenewalPaymentLRF>renewalPaymentLRF
</RenewalPaymentLRF>
                        <PricePerUtilizedUnit>pricePerUtilizedUnit
</PricePerUtilizedUnit>
                        <UtilityUnits>utilityUnits</UtilityUnits>
                        <EarlyPenalty>earlyPenalty</EarlyPenalty>
                        <LimitFee>limitFee</LimitFee>
                    </Option>
                </EOTOptions>
                <StepPayments>
                    <Step>
```

```
                        <StartingPaymentNumber>startingPaymentNumber
</StartingPaymentNumber>
                        <NumberPayments>numberPayments</NumberPayments>
                        <PaymentAmount>paymentAmount</PaymentAmount>
                        <PaymentFrequency>paymentFrequency
</PaymentFrequency>
                    </Step>
                </StepPayments>
                <CategoryLRFs>
                     <KeyValue>
                        <ProductCategory>productCategory</ProductCategory>
                        <LRF>lrf</LRF>
                    </KeyValue>
                </CategoryLRFs>
                <Assets>
                    <LineItem>
                        <ProductCategory>productCategory</ProductCategory>
                        <ExternalId>externalId</ExternalId>
                        <ProductId>productId</ProductId>
                        <Manufacturer>manufacturer</Manufacturer>
                        <ProductDescription>productDescription
</ProductDescription>
                        <UnitRent>unitRent</UnitRent>
                        <CostCenter>costCenter</CostCenter>
                        <GLCode>glCode</GLCode>
                        <Quantity>quantity</Quantity>
                        <UnitPrice>unitPrice</UnitPrice>
                        <StandaloneObservablePrice>standaloneObservablePrice
</StandaloneObservablePrice>
                        <Units>units</Units>
                        <TotalSpace>totalSpace</TotalSpace>
                        <UsableSpace>usableSpace</UsableSpace>
                        <RentableSpace>rentableSpace</RentableSpace>
                        <PricePerUtilizedUnit>pricePerUtilizedUnit
</PricePerUtilizedUnit>
                        <UtilityPricingBasis>utilityPricingBasis
</UtilityPricingBasis>
```

```
                    </LineItem>
                    …
                </Assets>
                <RemoveAssets>
                    <LineItem>
                        <ExternalId>externalId</ExternalId>
                        <AssetId>assetId</AssetId>
                    </LineItem>
                    …
                </RemoveAssets>
                <RemoveEvents>
                    <AssetEvent>assetEvent</AssetEvent>
                    <EffectiveDate>effectiveDate</EffectiveDate>
                    <PurchasePrice>purchasePrice</PurchasePrice>
                    <ReturnFee>returnFee</ReturnFee>
                    <BorrowerObligation>borrowerObligation
</BorrowerObligation>
                    <SaleProceeds>saleProceeds</SaleProceeds>
                    <TRACAmount>tracAmount</TRACAmount>
                    <ReturnShipmentDate>returnShipmentDate
</ReturnShipmentDate>
                    <RMANumber>rmaNumber</RMANumber>
                    <ReturnLogistics>returnLogistics</ReturnLogistics>
                    <Comments>comments</Comments>
        <PercentReduction>percentReduction</PercentReduction>
                </RemoveEvents>
            </ModifyDeal>
            …
</Payload>
```

For each deal to be loaded, the payload should include a Deal tag populated with the following information:

Detail	Type	Description
scheduleNumber	Alphanumeric (256)	Unique identifier for a lease which needs to be modified.

Detail	Type	Description
leaseType	FMV, FinLse-FixPO, FinLse-Put, First Amend, Full-Service, Gross, Lev-Debt, Lev-Equity, Loan/NSA, Municipal, Split-TRAC, Synthetic, TRAC, Triple-Net	Type of contractual agreement. FMV and FinLse-Put (also known as "$1 Out") are the most commonly used structures.
frequency	Monthly Bi-monthly Quarterly Semi-annual Annual	Periodic nature of payments. If the lease uses a step payment schedule with multiple payment frequencies, specify Monthly here.
repaymentMode	Advance Arrears	Specifies whether payments will be made at the beginning of the period or at the end of the period.
duration	Numeric (4)	Number of payments between commencement and original end of term. (Examples: 3-year lease paid monthly, Duration is 36. 3-year lease paid quarterly, Duration is 12.) Must be positive number
paymentBasis	LRF Fixed Floating	Indicates whether the lease pricing is quoted in terms of a Lease Rate Factor (LRF), a Fixed Interest Rate (Fixed), or a Floating Interest Rate (Floating). If the paymentBasis is specified as an LRF, a Lrf must be specified. If the paymentBasis is specified as a Fixed rate, the interestRate must be specified, along with an optional residualAmount. If the paymentBasis is specified as a Floating rate, the indexBasis, spreadOverIndex, benchmarkDateForIndexedRates, and adjustmentFrequency must all be specified.
downPayment	Number	Any amount that must be paid upfront by the lessee and is not included in the net amount financed. Specify without currency formatting.

Detail	Type	Description
lrf	Numeric (Total = 18, Precision = 12) Expressed as a decimal x.xxxxx	Lease Rate Factor. Numeric factor expressed as a decimal used to calculate a payment, renewal or buyout amount by multiplying against the Original Equipment Cost. Required if Payment not specified. Note that the blendedLrf times the aggregate extended price (quantity * unitPrice) of the specified line items must match the periodicPayment (if both blendedLrf and periodicPayment are specified) or the request will be rejected with an error. Should be specified only if paymentBasis is LRF.
interestRate	Number	Specifies the annual interest rate used to price the transaction, e.g., 3.5%. Note that the rate should be entered as a number, e.g., 3.5, without the percent sign. For calculation purposes, interest is compounded monthly. Should be specified only if paymentBasis is Fixed.
payment	Number	The periodic payment amount. Note that this must match the calculated amount based on the specified paymentBasis and associated attributes.
spreadOverIndex	Number	The uplift to be added to the basis rate in order to arrive at the rate used to calculate the periodic payment, e.g., 1.5%. Note that the payment calculated by applying the uplifted basis rate as of the specified benchmarkDate to the aggregate extended price (quantity * unitPrice) of the specified line items, less any specified residualAmount, must match the periodicPayment (if both interestRate and periodicPayment are specified) or the request will be rejected with an error. Note that the spread should be entered as a number, e.g., 1.5, without the percent sign. Should be specified only if paymentBasis is Floating.
indexBasis	Number	Name of the index used to calculate the lease payment.
benchmarkDateForIndexedRates	Date (MM/DD/YYYY)	The date that the initial floating rate is based on. This serves as the base index by which changes are measured from. Required if Floating Rate Lease. Should be specified only if paymentBasis is Floating.

Detail	Type	Description
rentEscalationCap	Numeric	Maximum increase that a rental payment may increase for a single measurement if floating rate lease. Number >= 0 or Null (if None). Should be specified only if paymentBasis is Floating.
adjustmentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	The frequency with which the interest rate will be recalculated. Interest rates will be recalculated on the specified anniversary of the benchmarkDate. Should be specified only if paymentBasis is Floating.
accountingClassification	Capital, Operating, Capitalized-Operating	For ASC840, Operating or Capital Leases. For ASC842 Capitalized Operating or Finance. For IFRS 16, Finance. Leave blank to engage automated LA Classification Engine
overrideExplanation	Alphanumeric (2500)	Explanation for accounting classification. Required if Accounting Classification is input
reasonableCertainHoldingPeriod	Numeric (4)	Number of months that the assets contained in the lease are expected to be used. This may be shorter than Duration if assets are typically bought out early or may be longer than duration if renewal periods are typically exercised or evergreen is typically incurred. Must be a positive number and must be number of months regardless of Frequency.
estimatedGuaranteedResidualValue	Numeric (4)	The estimated guaranteed residual value for the lease.
comments	Alphanumeric (2500)	Free form field for user comments
modificationDate	Date (MM/DD/YYYY)	Modification date
assetAvailableDate	Date (MM/DD/YYYY)	Date from when the newly added asset will be available
commensurateAdjustment	Y N	Has the payment been adjusted in proportion to the change in assets?
remeasureROUBasis	Asset Liability	Change in Liability (entire gain/loss recognized at date of modification or Change in Asset (part of gain/loss recognized over revised term) .

Detail	Type	Description
interimRentType	Exempt, Accrue and Pay at Commencement, Accrue and Add to Amount Financed at Commencement	Type of Interim Rent which denotes how and when to apply the rent to the payment schedule. Specifies whether the lease does not have interim rent (Exempt), accrues interim rent which is payable on the first day of the lease (Accrue and Pay at Commencement), or accrues interim rent that is then rolled into the financed amount (Accrue and Add to Amount Financed at Commencement).
interimRentBasis	Fixed Floating Same Amount	The basis for the rent charge. Specifies whether interim rent will be calculated based on a fixed interest rate (Fixed), based on a rate that floats proportionate to the base lease terms based on changes in a publicly reported interest rate (Floating), based on a pro rata daily charge equal to the monthly rent throughout the term of the lease (Same), or based on a fixed amount already determined (Amount). If Fixed is specified, then either interimRate or interimLRF must be specified. If Floating is specified, then interimIndexType must be specified. If Amount is specified, then interimRent must be specified. Should be specified only if interimRentType is not EXEMPT.
interimRate	Numeric (Total = 18, Precision = 12)	The interest rate benchmark if Interim Rent Basis = Floating. Also required for Fixed. Number >0.
interimSpread	Numeric (Total = 18, Precision = 12)	An increment/decrement to the Interim Rate to determine the final Interim Rent. Number; may be positive or negative.
interimIndexType	See Interim Index Type list	The public index to which the interim floating rate is tied. Should be specified only if interimRentBasis is Floating and interimRentType is not EXEMPT.
interimRentAmount	Numeric (Total = 18, Precision = 2)	Amount of Interim Rent amount. Number >0. May be blank if Interim LRF is defined to calculate payment amount. Specify only if interimRentBasis is Amount and interimRentType is not EXEMPT.

As part of the financing terms, any available mid-term/end-of-term options may be specified, each in an EOTOptions tag:

Detail	Type	Description
optionType	Buyout Renewal Return	The type of option.
timing	Mid-Term EOT	Indicates whether the option is exercisable at a specific point in time (Mid-Term) or if the option is exercisable at end of term (EOT), even if that date changes as a result of a Renewal event.
reasonablyCertain	Y N	Should be set to Y if this is the option which is reasonably certain to be exercised at end of term.
effectiveMonth	Integer	Specifies the month number in which the option may be exercised. For Renewal options, this should be the first month number after the end of term, e.g., 37 for a three-year lease. If optionTiming is specified as Mid-Term, then monthExercisable must be specified.
description	Alphanumeric	Description for each of the EOT option for reference.
minDaysNotice	Integer	The minimum advance notice in days that a lessee must provide to the lessor before they can exercise the option. If specified, notificationRequired will be treated as Y for the option, regardless of what is specified.
maxDaysNotice	Integer	The maximum advance notice in days that a lessee may provide to the lessor that they intend to exercise the option. If specified, notificationRequired will be treated as Y for the option, regardless of what is specified.
exercisableByLessee	Y N	Indicates whether this option is exercised at the discretion of the Lessee (Y) or the Lessor (N). If not specified, defaults to Y.
purchasePrice	Number	The prenegotiated price for a Buyout option. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified purchasePrice. If purchasePrice is not specified for a Buyout option, it is assumed to be an FMV Buyout, with purchase price to be determined at the time of exercise. This tag should not be specified unless optionType is Buyout.
buyoutCeiling	Number	The minimum price for a Buyout option. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified minimumPurchasePrice. This tag should not be specified unless optionType is Buyout.

Detail	Type	Description
buyoutFloor	Number	The maximum price for a Buyout option, also known as a Buyout cap. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified maximumPurchasePrice. This tag should not be specified unless optionType is Buyout.
renewalTerm	Integer	The number of months to which the lessee commits to renew the assets at the specified renewalPayment, if the option is exercised.
renewalPayment	Number	The prenegotiated periodic payment for a Renewal option. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified renewalPayment. If renewalPayment is not specified for a Renewal option, it is assumed to be an FMV Renewal, with renewal payment to be determined at the time of exercise. This tag should not be specified unless optionType is Renewal.
utilityUnits	Acres Square Feet Square Meters	Specifies the utilization unit used to price the renewal. This renewal option will be applicable only to assets for which utilization-based pricing is specified, and where the pricing is based on the matching utilization unit type.
earlyPenalty	Number	A prenegotiated fee associated with a Return option, often for early returns. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified returnFee. If returnFee is not specified for a Return option, no return fee is assumed to apply. This tag should not be specified unless optionType is Return.
limitFee	Number	The maximum fee associated with a Return option, also known as a Limit. May be specified as a fixed amount (e.g., 5000) or as a percentage of original equipment cost (e.g., 12.5%); the percent sign is used to interpret the specified maximumReturnFee. This tag should not be specified unless optionType is Return.

If the payment schedule features uneven rentals not wholly attributable to a floating interest rate, the payment schedule should be defined explicitly using a StepPaymentSchedule:

Detail	Type	Description
startingPaymentNumber	Integer	The month in which this step begins. The first monthNumber is 1.

Detail	Type	Description
numberPayments	Integer	The number of consecutive payment periods, starting from monthNumber, during which the same payment amount will be due on the same payment frequency. Note that the StepPaymentSchedule should define enough Steps to cover the entire lease, and each month within the lease term should be associated with exactly one Step. Steps may not overlap.
paymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	The frequency with which payments will be made in this step.
paymentAmount	Number	The amount to be paid for each payment period in this step.

If lease rate factor is required for each product, CategoryLRFs needs to be added with below specific tags

Detail	Type	Description
productCategory	Alphanumeric	The product category for which LRF is to be updated
lrf	NUMBER	The LRFS rate for respective product category

If assets need to be added as part of the modification then asset details must be provided in the Assets tag. A LineItem element must be specified for each asset. For each line item, you can specify:

Detail	Type	Description
productCategory	See Product Category list	Grouping of assets by type
externalId	Alphanumeric (64)	Used to identify parent/child relationships (if any) for a group of assets.
productNumber	Alphanumeric (64)	A unique identifier for equipment typically used to delineate the type of equipment in the manufacturer's product catalogue.
manufacturer	Alpha (200)	Company Name. This field may be used to identify the Real Estate Developer for a real estate lease.
productDescription	Alphanumeric (1024)	Description of equipment or real estate which may include model year, make, lot number, parcel number, and other descriptors.
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.

Detail	Type	Description
unitRent	Numeric (Total = 18, Precision = 2)	A specific rental or payment amount defined in the lease agreement for the specific asset or lease component. If the standalone observable price is not provided, this amount will be used as the estimate for allocating the total payments to each individual component and/or asset (if provided). If unit rent is specified for one asset, it must be specified for all assets on schedule. The accounting standards prescribe the use of the SOP. This field should be entered if the explicit SOP or an estimate is used. However, LeaseAccelerator does not REQUIRE the field since the system has default rules-based estimates. Must be > 0
glCode	Alphanumeric (128)	GL Coding Convention ruleset that maps to the series of account codes where accounting transactions are recorded for this asset. Must exactly match value set during GL Configuration in UI; Settings: Ledger Number: Set of Books Edit: GL Code (Coding Convention). Enter only if different than Lease Start Date
quantity	Numeric (Total = 18, Precision = 2)	Number of units. Must be >0; If blank, system assumes 1
unitPrice	Numeric (Total = 18, Precision = 2)	Original equipment cost per unit in local currency. This is not an extended price; that will be calculated by LeaseAccelerator. Must be >0
standaloneObservablePrice	Numeric (Total = 18, Precision = 2)	The price at which the Lessee would purchase the lease or non-lease component separately. The relative percent for each component is used to allocate the total consideration of lease payments to each component for accounting purposes. If the observable standalone prices are not readily available, the Lessee shall estimate the standalone prices, maximizing the use of observable information. If observable price is entered for one asset, it should be entered for all assets, even if the observable price is the same as the unit price. The accounting standards prescribe the use of the SOP. This field should be entered if the explicit SOP or an estimate is used. However, LeaseAccelerator does not REQUIRE the field since the system has default rules-based estimates. Must be > 0
units	Square Feet, Square Meters, Acres	The unit of measure for area (currently used for real estate leases). Required if payments are utility-based calculations (versus a specified amount).
totalSpace	Numeric (10)	The amount of total space leased. Required if payments are utility-based calculations (versus a specified amount). Required only if utilityPricingBasis is Total.

Detail	Type	Description
usableSpace	Numeric (10)	The amount of space that can be used in the leased premises, generally measured from wall to wall. Required only if utilityPricingBasis is Usable.
rentableSpace	Numeric (10)	Refers to the usable space, plus a proportional share of common areas of the building, such as the main lobby, elevator lobbies and hallways, and bathrooms that are outside a tenant's leased space and available for use by other tenants, etc. Required only if utilityPricingBasis is Rentable.
pricePerUtilizedUnit	Numeric (Total = 18, Precision = 2)	Price Per Utilized Unit - Rate used to determine rental payment. Required if Utility Based payment; Amount >0. For example, $100/square foot for 1000 square feet of usable space, utilityPricing would be 100, units would be Square Feet and usableSpace would be 1000 and utilityPricingBasis would be Usable.
utilityPricingBasis	Total, Usable, Rentable	The type of space factor used to identify the quantity of space rented. Required if Utility based pricing.

The Remove assets and Remove events operation is used to remove the assets from the deal. The details can be specified as below

Detail	Type	Description
assetId	Integer	The unique ID used by LeaseAccelerator to identify an asset. Identifies an asset for which an event is being recorded.
externalId	Text	A linking ID, typically referencing a corresponding ID in an external system. This may be useful in environments where line items are being transferred from a procurement system, for example, so that events can be recorded for assets from an asset management system without knowing the LeaseAccelerator assetId.
assetEvent	Buyout Renewal Return Impairment Other	End-of-Term action.
effectiveDate	Date (MM/DD/YYYY)	The date on which the assets are terminated (for Buyout and Return) or the first day of the renewal period (for Renewal). If not specified, defaults to the current date.
purchasePrice	Numeric (Total = 16, Precision = 2)	The total purchase price for the Buyout, specified as a fixed amount (e.g., 5000). This tag should not be specified unless optionType is Buyout. If the optionType is specified as Buyout, but the purchasePrice is not specified, it will be assumed to be a zero buyout.

Detail	Type	Description
returnFee	Numeric (Total = 18, Precision =2)	The fee associated with the Return, if any. Should be specified as a fixed amount (e.g., 5000) or left blank if the amount of any return fees is not yet known. This tag should not be specified unless optionType is Return. If the optionType is specified as Return, but the returnFee is not specified, it will be assumed that no return fees apply.
borrowerObligation	Alphanumeric	For certain types of leases notably TRAC and Split-TRAC, which are common forms of fleet lease structures, the return fee is calculated based on an expected residual amount, of which the borrower's portion may be capped, and may be reduced by the proceeds from the sale of the returned asset as realized by the lessor.
saleProceeds	Y N	Indicates whether the returnFee will be reduced by the proceeds, if any, from the sale of the asset by the lessor subsequent to returning the asset.
tracAmount	Numeric	A TRAC (terminal rental adjustment clause) lease is a tax-oriented lease of qualified motor vehicles and trailers. A TRAC lease permits or requires an adjustment of rentals according to the amount realized by the lessor upon a sale of the leased equipment. The TRAC amount is the amount the lessor realizes after the sale of the equipment. This is also known as the Estimated Residual Value.
rmaNumber	Alphanumeric	The Return Merchandise Authorization (RMA) number issued to authorize return of equipment. This tag should not be specified unless optionType is Return.
returnShipmentDate	Date (MM/DD/YYYY)	If the event is Return then the shipment date can be added
returnLogistics	Alphanumeric	The logistics details if the event is Return type
comments	Alphanumeric	Comments for the remove events
percentReduction	Numeric	The amount as a percentage to reduce the scope of the remaining assets in the modification

```
Response:    <Payload>
            <ImportResults>
                <ImportResult>
                    <severity>severity</severity>
                    <message>message</message>
                </ImportResult>
                <ImportResult>
              <dealId>originalDealId</dealId>
              <importSessionId>importSessionId</importSessionId>
              <importType>ModifyDealImportStep2</importType>
```

```
            <key>originalDealNumber</key>
            <message>Modification saved successfully. Please classify the
resulting deal before booking in order to produce accurate
accounting</message>
            <newDealId>newDealId</newDealId>
            <severity>INFO</severity>
               </ImportResult>
           </ImportResults>
…
</Payload>
```

The Response payload will contain warnings and errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request. The results will also contain an INFO ImportResult that will contain the dealId and number of the original deal and the dealId of the new deal created as part of the modification.

Record Asset Event

Operation: RecordAssetEvent

```
Request:    <Payload>
             <AssetEvent>
                    <OptionType>optionType</OptionType>
                    <BuyoutPrice>purchasePrice</BuyoutPrice>
                    <RenewalTerm>renewalTerm</RenewalTerm>
                    <RenewalPayment>renewalPayment</RenewalPayment>
                    <RenewalPaymentFrequency>renewalPaymentFrequency
</RenewalPaymentFrequency>
                    <ImpairmentAmount>impairmentAmount</ImpairmentAmount>
                     <ReturnFee>returnFee</ReturnFee>
                    <RMANumber>rmaNumber</RMANumber>
                    <EffectiveDate>effectiveDate</EffectiveDate>
                    <LedgerDate>ledgerDate</LedgerDate>
                    <Assets>
                           <Asset>
                                  <AssetId>assetId</AssetId>
                                  <ExternalId>externalId</ExternalId>
                           </Asset>
                           …
```

```
                    </Assets>
                </AssetEvent>
                ...
            </Payload>
```

The RecordAssetEvent operation is used to record the Return, Purchase, or Renewal of assets. The Payload for a RecordAssetEvent request consists of a set of AssetEvent tags identifying the nature and economics of the event, with a nested set of Asset tags identifying the affected assets:

Detail	Type	Description
optionType (Note - substituted for eotEventGroup in xsd)	Buyout Renewal Return Impairment Other	End-of-Term action.
buyoutPrice (Note - substituted for BuyoutCostGroup in xsd)	Numeric (Total = 16, Precision = 2)	The total purchase price for the Buyout, specified as a fixed amount (e.g., 5000). This tag should not be specified unless optionType is Buyout. If the optionType is specified as Buyout, but the purchasePrice is not specified, it will be assumed to be a zero buyout.
renewalTerm	Numeric (4)	The number of months by which the lease is being extended. This tag should not be specified unless optionType is Renewal. If the optionType is specified as Renewal, but the renewalTerm is not specified, the renewal will be recorded as an indefinite, month-to-month extension and the deal will be placed into Evergreen.
renewalPayment	Numeric (Total = 16, Precision = 2)	The agreed upon periodic payment over the renewal term. Should be specified as a fixed amount (e.g., 5000). This tag should not be specified unless optionType is Renewal. If the optionType is specified as Renewal, but the renewalPayment is not specified, it will be assumed to be a zero renewal.
renewalPaymentFrequency	Monthly Bi-monthly Quarterly Semi-annual Annual	The frequency with which payments will be made during the renewal period. This tag should not be specified unless optionType is Renewal. If the optionType is specified as Renewal, but the renewalPaymentFrequency is not specified, the payment frequency from the original term (or any preceding renewal term) will be used as the payment frequency for the new extension.

Detail	Type	Description
impairementAmount	Numeric (Total = 18, Precision =2)	While not a direct event specific to an End of Term or Mid Term option within the lease, the Accounting Standards require Lessees to evaluate the ROU Asset for impairment just like they do for an Owned Asset. The impairment amount entered will be applied to the ROU Asset and generate the appropriate accounting. This tag should not be specified unless optionType is Impairment.
returnFee	Numeric (Total = 18, Precision =2)	The fee associated with the Return, if any. Should be specified as a fixed amount (e.g., 5000) or left blank if the amount of any return fees is not yet known. This tag should not be specified unless optionType is Return. If the optionType is specified as Return, but the returnFee is not specified, it will be assumed that no return fees apply.
rmaNumber		The Return Merchandise Authorization (RMA) number issued to authorize return of equipment. This tag should not be specified unless optionType is Return.
effectiveDate	Date (MM/DD/YYYY)	The date on which the assets are terminated (for Buyout and Return) or the first day of the renewal period (for Renewal). If not specified, defaults to the current date.
ledgerDate	Date (MM/DD/YYYY)	For accounting purposes, the first date for which this event is reportable. This is used primarily for backdated events (e.g., a return learned about two months later) where the event predates the last closed month end date. If not specified, defaults to the current date.
assetId	Integer	The unique ID used by LeaseAccelerator to identify an asset. Identifies an asset for which an event is being recorded.
externalId	Text	A linking ID, typically referencing a corresponding ID in an external system. This may be useful in environments where line items are being transferred from a procurement system, for example, so that events can be recorded for assets from an asset management system without knowing the LeaseAccelerator assetId.

```
Response:    <Payload>
            <ImportResults>
                <severity>severity</severity>
                <message>message</message>
            </ImportResults>
       …
```

```
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Record Event

Operation: RecordEvent

```
Request:    <Payload>
<Event>
        <DealId>dealId</DealId>
        <EventId>eventid</EventId>
        <EventType>eventType</EventType>
        <UserName>userName</UserName>
        <Comments>comments</Comments>
        <Timestamp>eventDate</Timestamp>
        <EAffectedElement>artifactId</EAffectedElement>
</Event>
</Payload>
```

The Payload for a RecordEvent request consists of an Event tag, which identifies an event to be recorded based on the following attributes:

Detail	Type	Description
dealId	Integer	The unique transaction ID used by LeaseAccelerator to identify a deal.
eventId	Integer	Used for rolling back an event. The unique LeaseAccelerator generated EventId of the event.
eventType	Return Impairment	Return @ End of Term (Reasonably Certain) Asset Event Option Impairment Asset Event Option.
userName	Text	The name used to record the event. If not specified, this defaults to the user credentials used to authenticate the API connection.
comments	Text	A free-form text block of additional comments to be recorded as part of the event.
eventDate	Date (MM/DD/YYYY)	The effective date of the event. Only the effective date can be overridden; the recorded date will be populated with the current date when the API request is processed.
artifactId	Integer	The unique document ID used by LeaseAccelerator to identify a specific document within a deal. Required for all event types except for Annotate, RentalStarted, and StatusAnnotation.

Response: <Payload></Payload>

This method has an empty Payload. The standard Response element indicates whether the event was successfully recorded or not.

Revoke User Credentials

Operation: RevokeUser

This method is used to revoke credentials in LeaseAccelerator and is intended for use only in environments where Single Sign-On (SSO) is in use.

```
Request:    <Payload>
<User>
       <FullName>fullName</FullName>
       <Email>email</Email>
       <ExternalId>externalId</ExternalId>
       <UserName>username</UserName>
       <RoleKey>roleKey</RoleKey>
</User>
…
</Payload>
```

The Payload for a RevokeUser request consists of a set of User tags:

Detail	Type	Description
fullName	Alphanumeric (150)	First name Last name
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
externalId	Text	The key used by the Identity Provider to uniquely identify this user, and that will be provided as part of authenticating this user through SSO.
username	Text	The user name of the user to be revoked
roleKey	Operations, PortfolioUser, PowerUser, SystemIntegration, User, Staff	The grouping which identifies the extent of functionality that a user is given.

Response: <Payload></Payload>

This method has an empty Payload. The standard Response element indicates whether the users were successfully revoked.

Rollback Event

Operation: RollbackEvent

This method is used to undo or rollback an event previously recorded in LeaseAccelerator. Currently, only EOT events and payment adjustment events are able to be rolled back.

```
Request:    <Payload>
<Event>
    <DealId>dealId</DealId>
    <EventId>eventId</EventId>
</Event>
…
</Payload>
```

The Payload for a RevokeUser request consists of a set of User tags:

Detail	Type	Description
dealId	Numeric	The unique id of the deal in LeaseAccelerator.
eventId	Numeric	The unique id of the event in LeaseAccelerator.

Response: <Payload></Payload>

This method has an empty Payload. The standard Response element indicates whether the events were rolled back.

Update Assets

Operation: UpdateAssets

```
Request:    <Payload>
      <Asset>
            <AssetId>assetId</AssetId>
            <ExternalId>externalId</ExternalId>
            <CostCenter>costCenter</CostCenter>
            <Project>project</Project>
            <GLCode>glCodingConvention</GLCode>
            <AvailableDate>availableDate</AvailableDate>
            <DepreciationStartDate>depreciationStartDate
</DepreciationStartDate>
            <ReferenceNumber>referenceNumber</ReferenceNumber>
            <SerialNumber>serialNumber</SerialNumber>
            <AssetTag>assetTag</AssetTag>
            <Comments>assetComments</Comments>
            <AssetOwner>assetOwner</AssetOwner>
```

```
            <AssetUser>assetUser</AssetUser>
            <AddressId>addressId</AddressId>
            <ShipToId>shipToId</ShipToId>
            <ShipToAddress1>ShipToAddress1</ShipToAddress1>
            <ShipToAddress2>ShipToAddress2</ShipToAddress2>
            <ShipToCity>ShipToCity</ShipToCity>
            <ShipToStateProvince>ShipToStateProvince</ShipToStateProvince>
            <ShipToCountry>ShipToCountry</ShipToCountry>
            <ShipToPostalCode>ShipToPostalCode</ShipToPostalCode>
            <ShipToKey>shipToKey</ShipToKey>
            <MACAddress>macAddress</MACAddress>
            <IPAddress>ipAddress</IPAddress>
            <CommonName>commonName</CommonName>
            <ExternalIdNew>newExternalId</ExternalIdNew>
            <FullyQualifiedName>fqn</FullyQualifiedName>
            <ServiceState>serviceState</ServiceState>
            <OptionType>optionType</OptionType>
            <RenewalTerm>renewalTerm</RenewalTerm>
            <CompanyCode>companyCode</CompanyCode>
            <ProfitCenter>profitCenter</ProfitCenter>
            <InternalOrder>internalOrder</InternalOrder>
            <Vendor>vendor</Vendor>
            <PropertyTaxAuthority>propertyTaxAuthority
</PropertyTaxAuthority>
            <EffectiveDate>effectiveDate</EffectiveDate>
            <AllocationPercent>pct</AllocationPercent>
            <DefaultDispositionEOT>disposition</DefaultDispositionEOT>
      </Asset>
      …
       </Payload>
```

For each asset to be updated, you must specify either an assetId or an externalId. All other attributes are optional; only attributes that are specified with a non-empty value will be updated. Updating asset location is tricky, as it can be difficult to differentiate between locations with similar addresses, and errors and inconsistent address specification are common. As such, when updating the location, you can specify the asset location through any of three fields: shipToKey, addressId, or shipToId. Only one of the three should be specified. The data elements available as part of the UpdateAssets method are:

Detail	Type	Description
assetId	Integer	The unique ID used by LeaseAccelerator to identify an asset.
externalId	Text	A linking ID, typically referencing a corresponding ID in an external system. This may be useful in environments where line items are being transferred from a procurement system, for example, so that assets can be updated from the procurement system without knowing the LeaseAccelerator assetId.
costCenter	Alphanumeric (32)	Department code asset is assigned to for responsibility/management reporting. Required if part of General Ledger String. Note that this will be validated against the list of configured cost centers.
project	Alphanumeric (150)	Project code asset is assigned for responsibility/management reporting. Note that this will be validated against the list of configured projects. Check with your LeaseAccelerator Administrator to see what projects are configured for your environment.
glCodingConvention	Alphanumeric (128)	GL Coding Convention ruleset that maps to the series of account codes where accounting transactions are recorded for this asset. Must exactly match value set during GL Configuration in UI; Settings: Ledger Number: Set of Books Edit: GL Code (Coding Convention).
availableDate	Date (MM/DD/YYYY)	Date the asset becomes available for use by the Lessee. This date is used to define the effective dates for factors used in lease classification. Enter only if different than Lease Start Date.
depreciationStartDate	Date (MM/DD/YYYY)	The date that assets should begin to depreciate. Enter only if different than Lease Start Date or Available for Use Date.
referenceNumber	Alphanumeric (150)	Free form field which may be used for any number of reference numbers desired. This is often used to store a PO number or other operational reference information.
serialNumber	Alphanumeric (64)	Unique identifier for each asset
assetTag	Alphanumeric (64)	A field available to customers to group assets. Typically, the asset tag assigned by your physical asset management (PAM) or IT asset management (ITAM) team and may serve as a linking ID for reference to an external system. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
assetComments	Alphanumeric (2500)	Free form field for user comments
assetOwner	Alphanumeric (150)	Name of employee responsible from organization/fiduciary perspective. Must exactly match value on People Tab where Person Role Type = Asset Owner. If Blank, system defaults to value entered on Schedule Tab

Detail	Type	Description
assetUser	Alphanumeric (150)	Name of employee with custodial responsibility. Must exactly match value on People Tab where Person Role Type = Asset User. If Blank, system defaults to value entered on Schedule Tab
addressId	Integer	The unique address ID used by LeaseAccelerator to identify a location. If not already established, the location will be configured as a Ship To using the company with which the location is associated.
shipToId	Integer	The unique address ID used by LeaseAccelerator to identify a combination of company, location, and optional contact person which has been established as a Ship To.
ShipToAddress1	Alphanumeric (250)	Line 1 of mailing address of the physical location of asset. May or may not be the same address as defined on the Schedule tab. If blank, system defaults to value entered on Schedule.
ShipToAddress2	Alphanumeric (250)	Line 2 of mailing address of the physical location of asset. May or may not be the same address as defined on the Schedule tab. If blank, system defaults to value entered on Schedule.
ShipToCity	Alphanumeric (100)	City of mailing address of the physical location of asset. May or may not be the same as defined on the Schedule tab. If blank, system defaults to value entered on Schedule.
ShipToStateProvince	Alphanumeric (32)	State or province of the mailing address of the physical location of asset. May or may not be the same as defined on the Schedule tab. See Country Province List in Valid Values Glossary. If blank, system defaults to value entered on Schedule
ShipToCountry	See Country List	Country of mailing address of the physical location of asset. May or may not be the same address used on the Schedule tab. If blank, system defaults to value entered on Schedule.
ShipToPostalCode	Alphanumeric (16)	Zip Code or Postal Code of mailing address of the physical location of asset. May or may not be the same as defined on the Schedule tab. If blank, system defaults to value entered on Schedule.
shipToKey	Alphanumeric (100)	Facility Code (ShipTo Key) is a customer code associated with a specific ShipTo Address. Using a Facility Code on the PIW eliminates the need to enter any values in the ShipTo Address fields in the PIW only. Unique value, code cannot exist in the system already.
macAddress	Alphanumeric (32)	Description field often used for IT-related equipment. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.

Detail	Type	Description
ipAddress	Alphanumeric (32)	Description field used for identifying the Internet Points of Presence (POPs). This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
commonName	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
externalIdNew	Alphanumeric (100)	The new external Id of the asset. You can specify the existing external Id to locate the asset and user externalIdNew to change.
fqn	Alphanumeric (100)	Description field. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
optionType	Buyout Renewal Return	The type of option.
renewalTerm	Numeric (4)	The number of months by which the lease is being extended. This tag should not be specified unless optionType is Renewal. If the optionType is specified as Renewal, but the renewalTerm is not specified, the renewal will be recorded as an indefinite, month-to-month extension and the deal will be placed into Evergreen.
serviceState	Alphanumeric (128)	A description field often used by customers to define the work state of an asset. Examples may include: Out for Repair, Under Construction, In Service. This attribute is not used by LeaseAccelerator beyond reporting and may be repurposed.
companyCode	Alphanumeric (128)	The unique code to identify the company
profitCenter	Alphanumeric (128)	Unique code which represents the profit center
internalOrder	Alphanumeric (128)	
vendor	Alphanumeric (128)	
propertyTaxAuthority	Alphanumeric (128)	
effectiveDate	Date (MM/DD/YYYY)	The date the change to the asset is to be recorded for accounting purposes.
pct	Numeric	The percent allocation of the specified asset.
disposition	Alphanumeric	Default action to take on the asset at end-of-term. Valid values include ZeroBuyout or Evergreen

```
Response:    <Payload>
            <ImportResults>
                <severity>severity</severity>
```

```
                <message>message</message>
            </ImportResults>
…
</Payload>
```

The Response payload is typically empty but may include one or more warnings/errors if any were encountered during processing. Handling of warnings and errors encountered is dictated by the warningPolicy and errorPolicy specified by the request.

Update User Credentials

Operation: UpdateUser

The UpdateUser operation is used to update credentials in LeaseAccelerator and is intended for use only in environments where Single Sign-On (SSO) is in use.

The ScopeOfAccess and ScopeOfLedgers attributes will replace any current privileges for the specified user.

```
Request:    <Payload>
              <User>
                    <FullName>fullName</FullName>
                    <Email>email</Email>
                    <ExternalId>externalId</ExternalId>
                    <RoleKey>roleKey</RoleKey>
                    <UserName>username</UserName>
                    <ScopeOfAccess>
                          <Group-Entity>
                                <Entity>entity</Entity>
                                …
                          </Group-Entity>
                          <Group-Geo>
                                <Geo>geo</Geo>
                                …
                          </Group-Geo>
                          <Group-SBU>
                                <SBU>sbu</SBU>
                                …
                          </Group-SBU>
                    </ScopeOfAccess>
```

```
                    <ScopeOfLedgers>
                        <Group-Ledger>
                            <Ledger>ledger</Ledger>
                            …
                        </Group-Ledger>
                    </ScopeOfLedgers>
                </User>
                …
        </Payload>
```

The Payload for a UpdateUser request consists of one or more User tags:

Detail	Type	Description
fullName	Alphanumeric (150)	First name Last name
email	Alphanumeric (150)	Email address for POC. Valid Format contains @xxx
externalId	Text	The key used by the Identity Provider to uniquely identify this user, and that will be provided as part of authenticating this user through SSO.
roleKey	Operations, PortfolioUser, PowerUser, SystemIntegration, User, Staff	The grouping which identifies the extent of functionality that a user is given.
username	Text	The name of the user to update. Note: This field is required when updating the scope of access.
entity	Text	The Entity name to grant access to specified user
geo	Text	The Geo name to grant access to specified user
sbu	Text	The SBU name to grant access to specified user
ledger	Text	The Ledger name to grant access to specified user

Response: <Payload></Payload>

This method has an empty Payload. The standard Response element indicates whether the users were successfully federated or not

Ontology

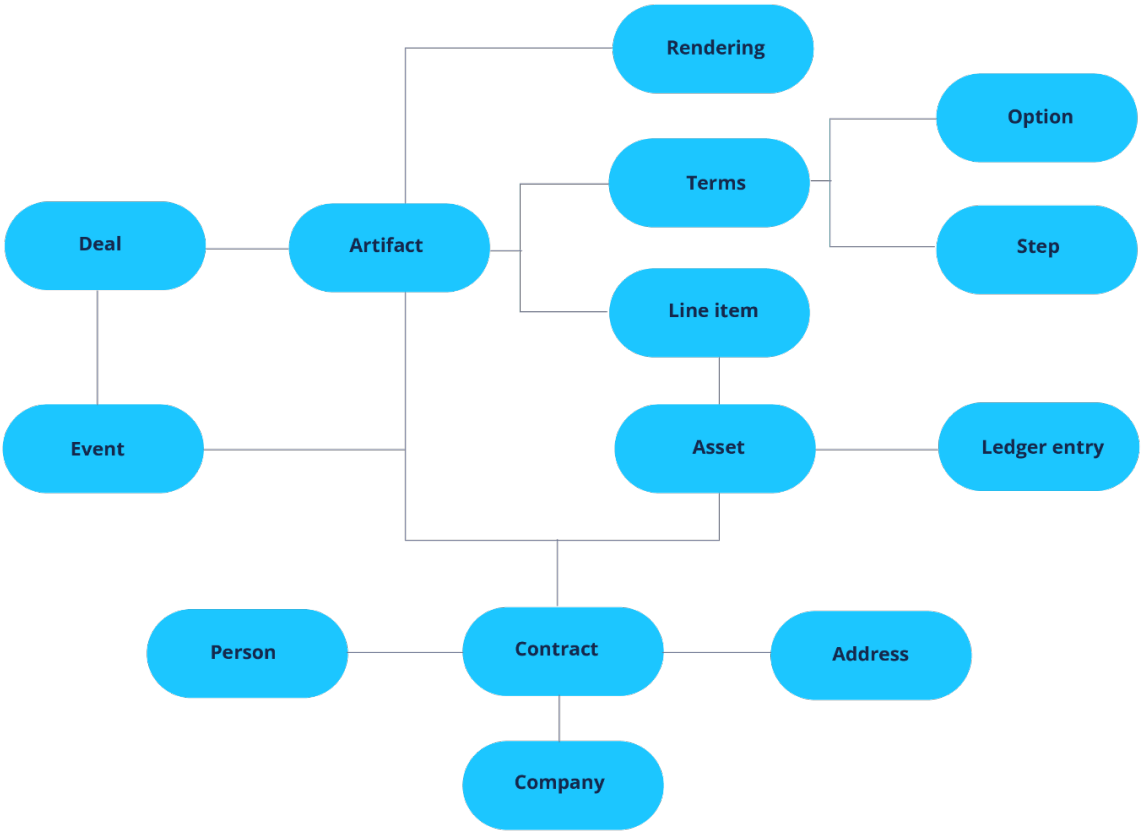
This section provides a data dictionary reference to the attributes used in the various Payload structures, as well as a broader data model of the key object types used by the LeaseAccelerator API.

Object Model

The major objects used by the LeaseAccelerator API are as follows:

Detail	Type
Deal	Also called Transaction, this is the highest-level element within the portfolio.
Artifact	Also called Document, this represents an identifiable document or similar artifact within a Deal. Any physical representation of the Artifact (e.g., a PDF file) is called a Rendering. An Artifact may include financing Terms, which may include one or more Options exercisable during or at the end of lease term. The financing Terms may also include a Step payment schedule.
Line Item	Represents one or more leased Assets with the same cost basis, category, description, etc. Assets have associated Ledger Entry records that provide the asset-level accounting.
Contact	A Contact or Participant is a Company with optional Person and/or Address participating in a Transaction in a certain capacity. Contacts may emphasize the Company facet (e.g., Lessee), the Person facet (e.g., Asset Owner), or the Address or Location facet (e.g., Ship To), and may be associated with a Transaction at the Artifact or Asset level.
Event	Events are always recorded in the context of a Deal; they may relate to or affect a specific Artifact.

The following diagram illustrates the relationship between the major objects in the LeaseAccelerator API, using crow's foot ERD notation:



Reference Lists

Many common data elements must comply with a configured list of values. The following sections list the accepted values for each such element.

AmendmentRequisition	CreditLine	EMail	InvoiceCredit	PriceQuote
AmendmentRequisition	CreditLine	EMail	InvoiceCredit	PriceQuote
AnnexA	CreditRequest	EOTDocument	JurisdictionRider	ProofOfDisposal
AssetManifest	CreditUsageRequest	EOTNotification	LandlordWaiver	Proposal
Assignment	CustomerFinancials	EquipmentList	LeaseReviewChecklist	PurchaseOrder
Attachment	DealSummary	ExemptionCertificate	LessorDownload	PurchaseRequisition
BillOfSale	DeclarationManifest	ExternalEmail	LvBAnalysis	RFP
CoverSheet	DisposalManifest		UCCFiling	

Document Types (Category of Document)

Artifact Types

Note that additional, custom artifact types may have been configured for your account. Please contact Support if you have custom artifact types.

	BuyoutPO	DisposalManifest	InvoiceCredit	Proposal
AmendmentRequisition	BuyoutQuote	EMail	JurisdictionRider	PurchaseOrder
AnnexA	CBSReference	EOTDocument	LeaseReviewChecklist	PurchaseRequisition
AssetManifest	CofA	EOTNotification	LessorDownload	RFP
AssetRequestForm	CoverSheet	ExemptionCertificate	LvBAnalysis	RenewalQuote
Assignment	CreditLine	ExternalEmail	MLA	RentalInvoice
Attachment	CreditRequest	FAS13Analysis	PAAC	Schedule
BillingInformation	CreditUsageRequest	FinancingPackage	PAR	ScheduleAmendment
BlanketApproval	DealSummary	InboundFAX	PriceQuote	StipLossTable
BuyoutInvoice	DeclarationManifest	Invoice	ProofOfDisposal	

Product Category List (Asset Types)

The list of valid asset types is below. Note that additional, custom asset types may have been configured for your account. Please contact Support if you have custom asset types.

Agriculture and Forestry	Food Processing	Office Equipment	Recreation
Aircraft and Related	Furniture and Fixtures	Office Equipment (Soft Costs)	Restaurant Fixtures
Automobiles	Furniture and Fixtures (Soft Costs)	Oil and Gas	Retail Fixtures
Broadcast/Audiovisual	Gaming	Other	Semiconductor
Building Improvement/Equipment	Laboratory Equipment	Packaging/Bottling	Servers
Building Improvement/Equipment (Soft Costs)	Machine/Shop Equipment	Point of Sale	Software
Building/HVAC	Manufacturing/Fabricating	Power and Pipeline	Storage
Buses	Marine	Power and Pipeline (Soft Costs)	Telecommunications
Computers/Peripherals	Material Handling	Printing/Publishing	Telephone Systems
Computers/Peripherals (Soft Costs)	Material Handling (Soft Costs)	Rail	Telephone Systems (Soft Costs)
Construction	Medical	Real Estate	Test and Measurement
Containers	Mining	Billboards	Trailers
Durable Tooling	Mobile Shop Equipment	Building	Trucks
Electronics	Modular Building	Data Center	Waste Remediation/ Recycling
Emergency Vehicles	Mold Tools	Land	
Energy Systems	Networking	Stadium Suite	

Currency List

The list of valid currencies is below:

USD	BAM	BZD	DKK	GMD	ISK	LKR	MTL	PAB	SBD	THB	VEF
USD	BAM	BZD	DKK	GMD	ISK	LKR	MTL	PAB	SBD	THB	VEF
AED	BBD	CAD	DOP	GNS	JMD	LRD	MUR	PEI	SCR	TJR	VES
AFN	BDT	CDZ	DZD	GTQ	JOD	LSL	MVR	PEN	SDD	TMM	VND
ALL	BGN	CHF	EEK	GWP	JPY	LTL	MWK	PGK	SEK	TND	VUV
AMD	BHD	CLF	EGP	GYD	KES	LVL	MXN	PHP	SGD	TOP	WST
ANG	BIF	CLP	ERN	HKD	KGS	LYD	MYR	PKR	SHP	TPE	XAF

USD	BAM	BZD	DKK	GMD	ISK	LKR	MTL	PAB	SBD	THB	VEF
AON	BMD	CNY	ETB	HNL	KHR	MAD	MZN	PLN	SIT	TRY	XCD
AOA	BND	COP	EUR*	HRK	KMF	MDL	NAD	PYG	SKK	TTD	XOF
ARA	BOB	CRC	FJD	HTG	KRW	MGA	NGN	QAR	SLL	TWD	XPF
ARS	BRL	CSD	FKP	HUF	KWD	MKD	NIC	RON	SOS	TZS	YER
AUD*	BRR	CVE	GBP*	IDR	KYD	MMK	NOK	RSD	SRG	UAH	ZAR
AWG	BSD	CYP	GEL	ILS	KZT	MNT	NPR	RUB	STD	UGX	ZMW
AZM	BWP	CZK	GHS	INR	LAK	MOP	NZD*	RWF	SVC	UYU	ZWD
AZN	BYN	DJF	GIP	IQD	LBP	MRO	OMR	SAR	SZL	UZS	

Country and Province List

Acceptable abbreviations for provinces are listed, if cell is blank, no abbreviation is accepted.

Australian Capital Territory	ACT	Australia
New South Wales	NSW	Australia
Northern Territory	NT	Australia
Queensland	QLD	Australia
South Australia	SA	Australia
Tasmania	TAS	Australia
Victoria	VIC	Australia
Western Australia	WA	Australia
Acre	AC	Brazil
Alagoas	AL	Brazil
Amazonas	AM	Brazil
Amapá	AP	Brazil
Bahia	BA	Brazil
Ceará	CE	Brazil
Distrito Federal	DF	Brazil
Espírito Santo	ES	Brazil
Goiás	GO	Brazil
Maranhão	MA	Brazil
Minas Gerais	MG	Brazil
Mato Grosso do Sul	MS	Brazil
Mato Grosso	MT	Brazil
Pará	PA	Brazil
Paraíba	PB	Brazil
Pernambuco	PE	Brazil
Piauí	PI	Brazil
Paraná	PR	Brazil
Rio de Janeiro	RJ	Brazil
Rio Grande do Norte	RN	Brazil
Rondônia	RO	Brazil
Roraima	RR	Brazil
Rio Grande do Sul	RS	Brazil
Santa Catarina	SC	Brazil
Sergipe	SE	Brazil

Northwest Territories	NT	Canada
Nunavut	NU	Canada
Ontario	ON	Canada
Prince Edward Island	PE	Canada
Quebec	QC	Canada
Saskatchewan	SK	Canada
Yukon Territory	YT	Canada
Anhui		China
Beijing		China
Chongqing		China
Fujian		China
Guangdong		China
Gansu		China
Guangxi Zhuang		China
Guizhou		China
Hainan		China
Hebei		China
Henan		China
Heilongjiang		China
Hunan		China
Hubei		China
Jilin		China
Jiangsu		China
Jiangxi		China
Liaoning		China
Nei Mongol		China
Ningxia Hui		China
Qinghai		China
Shaanxi		China

Assam	AS	India
Bihar	BR	India
Chandigarh	CHD	India
Daman and Diu	DD	India
Delhi	DEL	India
Dadra and Nagar Haveli	DNH	India
Goa	GOA	India
Gujarat	GUJ	India
Himachal Pradesh	HP	India
Haryana	HR	India
Jharkhand	JH	India
Jammu and Kashmir	JK	India
Kerala	KER	India
Karnataka	KRN	India
Lakshadweep	LKP	India
Maharashtra	MAH	India
Meghalaya	MEG	India
Mizoram	MIZ	India
Manipur	MNP	India
Madhya Pradesh	MP	India
Nagaland	NLD	India
Orissa	OR	India
Pondicherry	PDY	India
Punjab	PU	India
Rajasthan	RAJ	India
Sikkim	SKM	India
Tamil Nadu	TN	India
Tripura	TRP	India
Uttar Pradesh	UP	India
West Bengal	WB	India
Cork		Ireland
Clare		Ireland
Cavan		Ireland
Carlow		Ireland

São Paulo	SP	Brazil
Tocantins	TO	Brazil
Alberta	AB	Canada
British Columbia	BC	Canada
Manitoba	MB	Canada
New Brunswick	NB	Canada
Newfoundland	NL	Canada
Nova Scotia	NS	Canada

Sichuan		China
Shandong		China
Shanghai		China
Shanxi		China
Tianjin		China
Xinjiang Uygur		China
Xizang		China
Yunnan		China
Zhejiang		China
Andaman and Nicobar Islands	AN	India
Andhra Pradesh	AP	India
Arunachal Pradesh	AR	India

Dublin		Ireland
Donegal		Ireland
Galway		Ireland
Kildare		Ireland
Kilkenny		Ireland
Kerry		Ireland
Longford		Ireland

Louth	Ireland
Limerick	Ireland
Leitrim	Ireland
Laoighis	Ireland
Meath	Ireland
Monaghan	Ireland
Mayo	Ireland
Offaly	Ireland
Roscommon	Ireland
Sligo	Ireland
Tipperary	Ireland
Waterford	Ireland
Westmeath	Ireland
Wicklow	Ireland
Wexford	Ireland
Agrigento	Italy
Alessandria	Italy
Ancona	Italy
Aosta	Italy
Ascoli Piceno	Italy
L'Aquila	Italy
Arezzo	Italy
Asti	Italy
Avellino	Italy
Bari	Italy
Bergamo	Italy
Biella	Italy
Belluno	Italy

Cremona	Italy
Cosenza	Italy
Catania	Italy
Catanzaro	Italy
Enna	Italy
Forlì-Cesena	Italy
Ferrara	Italy
Foggia	Italy
Florence	Italy
Frosinone	Italy
Genoa	Italy
Gorizia	Italy
Grosseto	Italy
Imperia	Italy
Isernia	Italy
Crotone	Italy
Lecco	Italy
Lecce	Italy
Livorno	Italy
Lodi	Italy
Latina	Italy
Lucca	Italy
Macerata	Italy
Medio Campidano	Italy
Messina	Italy
Milan	Italy
Mantua	Italy
Modena	Italy

Pisa	Italy
Pordenone	Italy
Prato	Italy
Parma	Italy
Pistoia	Italy
Pesaro e Urbino	Italy
Pavia	Italy
Potenza	Italy
Ravenna	Italy
Reggio Calabria	Italy
Reggio Emilia	Italy
Ragusa	Italy
Rieti	Italy
Rome	Italy
Rimini	Italy
Rovigo	Italy
Republic of San Marino	Italy
Salerno	Italy
Vatican City	Italy
Siena	Italy
Sondrio	Italy
La Spezia	Italy
Syracuse	Italy
Sassari	Italy
Savona	Italy
Taranto	Italy
Teramo	Italy
Trento	Italy

Benevento		Italy	Massa-Carrara		Italy	Turin		Italy
Bologna		Italy	Matera		Italy	Trapani		Italy
Brindisi		Italy	Naples		Italy	Terni		Italy
Brescia		Italy	Novara		Italy	Trieste		Italy
Bolzano-Bozen		Italy	Nuoro		Italy	Treviso		Italy
Cagliari		Italy	Ogliastra		Italy	Udine		Italy
Campobasso		Italy	Oristano		Italy	Varese		Italy
Caserta		Italy	Olbia-Tempio		Italy	Verbano-Cusio-Ossola		Italy
Chieti		Italy	Palermo		Italy	Vercelli		Italy
Carbonia-Iglesias		Italy	Piacenza		Italy	Venice		Italy
Caltanissetta		Italy	Padua		Italy	Vicenza		Italy
Cuneo		Italy	Pescara		Italy	Verona		Italy
Como		Italy	Perugia		Italy	Viterbo		Italy

Vibo Valentia		Italy
Hokkaido		Japan
Aomori		Japan
Iwate		Japan
Akita		Japan
Miyagi		Japan
Yamagata		Japan
Fukushima		Japan
Ibaraki		Japan
Tochigi		Japan
Gumma		Japan
Chiba		Japan
Saitama		Japan
Tokyo		Japan
Kanagawa		Japan
Niigata		Japan
Toyama		Japan
Ishikawa		Japan
Nagano		Japan
Gifu		Japan
Fukui		Japan
Yamanashi		Japan
Shizuoka		Japan
Aichi		Japan
Shiga		Japan
Kyoto		Japan
Hyogo		Japan
Mie		Japan

Kumamoto		Japan
Miyazaki		Japan
Kagoshima		Japan
Okinawa		Japan
Aguascalientes	AGS	Mexico
Baja California	BCN	Mexico
Baja California Sur	BCS	Mexico
Campeche	CAM	Mexico
Chihuahua	CHIH	Mexico
Chiapas	CHIS	Mexico
Coahuila	COAH	Mexico
Colima	COL	Mexico
Distrito Federal	DF	Mexico
Durango	DGO	Mexico
Guerrero	GRO	Mexico
Guanajuato	GTO	Mexico
Hidalgo	HGO	Mexico
Jalisco	JAL	Mexico
Mexico	MEX	Mexico
Michoacán	MICH	Mexico
Morelos	MOR	Mexico
Nayarit	NAY	Mexico
Nuevo León	NL	Mexico
Oaxaca	OAX	Mexico
Puebla	PUE	Mexico
Querétaro	QRO	Mexico
Quintana Roo	QROO	Mexico
Sinaloa	SIN	Mexico
San Luis Potosí	SLP	Mexico
Sonora	SON	Mexico
Tabasco	TAB	Mexico
Tamaulipas	TAMP	Mexico
Tlaxcala	TLAX	Mexico
Veracruz	VER	Mexico
Yucatán	YUC	Mexico
Zacatecas	ZAC	Mexico
Alaska	AK	US

Florida	FL	US
Georgia	GA	US
Hawaii	HI	US
Idaho	ID	US
Illinois	IL	US
Indiana	IN	US
Iowa	IA	US
Kansas	KS	US
Kentucky	KY	US
Louisiana	LA	US
Maine	ME	US
Maryland	MD	US
Massachusetts	MA	US
Michigan	MI	US
Minnesota	MN	US
Mississippi	MS	US
Missouri	MO	US
Montana	MT	US
Nebraska	NE	US
Nevada	NV	US
New Hampshire	NH	US
New Jersey	NJ	US
New Mexico	NM	US
New York	NY	US
North Carolina	NC	US
North Dakota	ND	US
Ohio	OH	US
Oklahoma	OK	US
Oregon	OR	US
Pennsylvania	PA	US
Puerto Rico	PR	US
Rhode Island	RI	US
South Carolina	SC	US
South Dakota	SD	US
Tennessee	TN	US
Texas	TX	US
US Virgin Islands	VI	US
Utah	UT	US
Vermont	VT	US

Nara		Japan
Osaka		Japan
Wakayama		Japan
Tottori		Japan
Shimane		Japan
Okayama		Japan
Hiroshima		Japan
Yamaguchi		Japan
Kagawa		Japan
Tokushima		Japan
Ehime		Japan
Kochi		Japan
Fukuoka		Japan
Saga		Japan
Nagasaki		Japan
Oita		Japan

Arizona	AZ	US
Arkansas	AR	US
California	CA	US
Colorado	CO	US
Connecticut	CT	US
Delaware	DE	US
Dist of Columbia	DC	US

Virginia	VA	US
Washington	WA	US
West Virginia	WV	US
Wisconsin	WI	US
Wyoming	WY	US

Country List

The list of valid countries is below:

US	British Indian Ocean Territory	El Salvador	Hong Kong
Afghanistan	Brunei	Equatorial Guinea	Hungary
Aland Island	Bulgaria	Eritrea	Iceland
Albania	Burkina Faso	Estonia	India
Algeria	Burundi	Ethiopia	Indonesia
American Samoa	Cambodia	Falkland Islands (Malvinas)	Iraq
Andorra	Cameroon	Faroe Islands	Ireland
Angola	Canada	Fiji	Isle of Man
Anguilla	Cape Verde	Finland	Israel
Antarctica	Cayman Islands	France	Italy
Antigua and Barbuda	Central African Republic	French Guiana	Ivory Coast
Argentina	Chad	French Polynesia	Jamaica

Armenia	Chile	French Southern Territories	Japan
Aruba	China	Gabon	Jersey
Australia	Christmas Island	Gambia	Jordan
Austria	Cocos (Keeling) Islands	Georgia	Kazakhstan
Azerbaijan	Colombia	Germany	Kenya
Bahamas	Comoros	Ghana	Kiribati
Bahrain	Congo	Gibraltar	Korea, Republic of
Bangladesh	Congo, The Democratic Republic of the	Greece	Kuwait
Barbados	Cook Islands	Greenland	Kyrgyzstan
Belarus	Costa Rica	Grenada	Laos
Belgium	Croatia	Guadeloupe	Latvia
Belize	Cyprus	Guam	Lebanon
Benin	Czech Republic	Guatemala	Lesotho
Bermuda	Denmark	Guernsey	Liberia
Bhutan	Djibouti	Guinea	Libya
Bolivia	Dominica	Guinea-Bissau	Liechtenstein
Bosnia-Herzegovina	Dominican Republic	Guyana	Lithuania
Botswana	East Timor	Haiti	Luxembourg
Bouvet Island	Ecuador	Heard Island and McDonald Islands	Macao
Brazil	Egypt	Honduras	Madagascar
Malawi	Northern Mariana Islands	Seychelles	United Kingdom
Malaysia	Norway	Sierra Leone	United States Minor Outlying Islands
Maldives	Oman	Singapore	Uruguay
Mali	Pakistan	Slovakia	Uzbekistan
Malta	Palau	Slovenia	Vanuatu
Marshall Islands	Palestinian Territory, Occupied	Solomon Islands	Vatican City
Martinique	Panama	Somalia	Venezuela
Mauritania	Papua New Guinea	South Africa	Vietnam
Mauritius	Paraguay	Spain	Virgin Islands, British
Mayotte	Peru	Sri Lanka	Virgin Islands, U.S.
Mexico	Philippines	Suriname	Wallis and Futuna
Micronesia, Federated States of	Pitcairn	Svalbard and Jan Mayen	Western Sahara
Moldova, Republic of	Poland	Swaziland	Yemen
Monaco	Portugal	Sweden	Zambia

Mongolia	Puerto Rico	Switzerland	Zimbabwe
Montserrat	Qatar	Taiwan, Province of China	
Morocco	Reunion	Tajikistan	
Mozambique	Romania	Tanzania, United Republic of	
Myanmar	Russia	Thailand	
Nambia	Rwanda	Togo	
Nauru	Saint Helena	Tokelau	
Nepal	Saint Kitts and Nevis	Tonga	
Netherlands	Saint Lucia	Trinidad and Tobago	
Netherlands Antilles	Saint Pierre and Miquedon	Tunisia	
New Caledonia	Saint Vincent and the Grenadines	Turkey	
New Zealand	Samoa	Turkmenistan	
Nicaragua	San Marino	Turks and Caicos Islands	
Niger	Sao Tome and Principe	Tuvalu	
Nigeria	Saudi Arabia	Uganda	
Niue	Senegal	Ukraine	
Norfolk Islands	Serbia	United Arab Emirates	

Expense Types

The list of valid expense types and subtypes is below.

Expense Type	Description	Valid Expense Subtypes
ARO	Expenses incurred at end of term as part of returning the leased assets in satisfactory condition	Cost to Dismantle or Remove (per Agreement)
		Equipment - Refurbishment
		Real Estate - Return to Original Condition

Expense Type	Description	Valid Expense Subtypes
CAMS	Common Area Maintenance expenses	Artwork
		Cafeteria Services
		Custodial
		Garage/Parking
		Landscaping
		Other
		Security
		Telecom Services
IDC	Indirect Costs	Commission
		Payment to prior Tenant to terminate early
LateFee	Late Fees	
LeaseIncentive	Lease Incentives	Paid on behalf of Lessee
		Paid to Lessee
Other	Other related expenses	Administration Fee
		After Hours Utilities - HVAC
		Base Year/Expense Stop
		Gross Up
		Landlord's Insurance
		Liability Insurance
		Marketing Fund
		Other Landlord Services
		Property Insurance
		R&M Premises
		Real Estate Taxes
		Receivable
		Rental Loss
		Utilities-Premises
SecurityDeposit	Security Deposits	
SpecialDeposit	Special Deposits	
		Sewer
		Utility
		Water

Expense Type	Description	Valid Expense Subtypes
Variable/Performance	Expenses incurred based on variable utilization or contingent on performance	Capacity Based
		Daily Rate
		Mileage Based
		Per Unit of Production

Index Basis List

Index Name	
Commercial Paper - 30 Day	Swap - 7 Year
Commercial Paper - 60 Day	Swap - 10 Year
Commercial Paper - 90 Day	Swap - 30 Year
Commercial Paper - 180 Day	Treasury Constant Maturities - 1 Month
Libor - 1 Month	Treasury Constant Maturities - 3 Month
Libor - 1 Year	Treasury Constant Maturities - 6 Month
Libor - 2 Month	Treasury Constant Maturities - 9 Month
Libor - 3 Month	Treasury Constant Maturities - 1 Year
Libor - 6 Month	Treasury Constant Maturities - 2 Year
Libor - Overnight	Treasury Constant Maturities - 3 Year
Prime	Treasury Constant Maturities - 5 Year
Swap - 1 Year	Treasury Constant Maturities - 7 Year
Swap - 2 Year	Treasury Constant Maturities - 10 Year
Swap - 3 Year	Treasury Constant Maturities - 20 Year
Swap - 4 Year	Banker's Acceptance (30-Day)
Swap - 5 Year	Consumer Price Index

Lease Type - Definitions and Genres

Key:

- EQ = Equipment
- RE = Real Estate

The following table defines the Lease Types and the business rules applicable to determining each.

Lease Type	Lease Genre	Value in PIW	Definition	Business Rule to Identify
Finance Lease - $1Out Mandatory Purchase	EQ	FinLse-Put	Lease which requires the Lessee to purchase the assets at the end of the term.	Any of the following: ▪ Title to assets automatically transfers to Lessee at the end of term ▪ Buyout Price = $1 ▪ Language similar to “Lessee is required to purchase assets”
Finance Lease - Fixed Purchase Option	EQ	FinLse-FixPO	Lease granting Lessee the option to purchase the assets at a fixed amount.	Any of the following: ▪ Option to Buy at a price of $$$
First Amendment Lease	EQ	First Amend	A lease which contains a first amendment clause. Used for Lessees who may opt to purchase equipment early. Typically includes a penalty for non-purchase or requires the Lessee to renew for a fixed number of months.	
Full Service Lease	RE	Full-Service	A lease where the Base Rent includes a baseline cost for CAMS and Other Rent charges but lease allows landlord to pass through incremental charges or credits to reflect the actual cost of CAMS and Other Rent expenses.	Real Estate Lease where: ▪ CAMS charges listed ▪ CAMS benchmark cost identified ▪ Contains CAMS Billing language ▪ Contains CAMS expense Reconciliation language

Lease Type	Lease Genre	Value in PIW	Definition	Business Rule to Identify
Leveraged Lease Debt	EQ	Lev-Debt	A lease agreement that is partially financed by the Lessor through a third-party financial institution. In a leveraged lease, the lending company holds the title to the leased asset, while the lessor creates the agreement with the Lessee and collects the payment. The payments are then passed on to the lender.	
Leveraged Lease Equity	EQ	Lev-Equity		
Loan / Note & Security Agreement	EQ	Loan/NSA	This is not a lease but a financed purchase either as a loan or promissory note.	
Modified Gross Lease	RE	Gross	A lease where the Base Rent includes all costs including CAMS and Other Rent; however, utilities may be separately identified as a cost where the landlord is allowed to pass through incremental charges or credits to reflect the actual Utility costs.	Real Estate lease where: ▪ Base Rent language exists ▪ Only Utility Cost Benchmark is identified ▪ Excess Utility cost pass through language ▪ Utility uses reconciliation language ▪ This is the default Lease Type for Real Estate

Lease Type	Lease Genre	Value in PIW	Definition	Business Rule to Identify
Municipal Lease Purchase	EQ	Municipal	A municipal or tax-exempt lease agreement allows a political subdivision to use annual revenues to make payments for any type of essential use equipment or facilities. While municipal leases are documented as a lease, they have characteristics similar to a loan. The Lessee owns the equipment at the end of the lease, and the lease can be paid off early. These financing agreements are structured as a lease to accommodate the fiscal funding restrictions of political subdivisions. In most cases, the obligation terminates if the Lessee fails to appropriate funds to make the renewal year's lease payments. Because of this provision, neither the lease nor the lease payments are considered debt (in most states).	
Other Financial Product	EQ	Other		
Split-TRAC Lease	EQ	Split-TRAC	A modified TRAC lease where the Lessor assumes part of the estimated residual value risk which may allow the Lessee to classify the transaction as an operating lease.	▪ Includes a possible return fee such that the Lessee has limited responsibility for the fee
Synthetic Lease	EQ	Synthetic	A disguised loan. Treated as a loan for tax purposes and an operating lease (off-balance sheet financing) for accounting purposes. Relies on Lessee to exercise FMV purchase option or pay substantial penalty for non-renewal.	
TRAC Lease	EQ	TRAC	Terminal Rental Adjustment Clause. A Lessee guaranteed residual value for vehicle leases (automobiles - trucks or trailers), the inclusion of which will not in and of itself disqualify the tax lease status of a tax-oriented vehicle lease.	▪ Includes a possible return fee that is born solely by the Lessee

Lease Type	Lease Genre	Value in PIW	Definition	Business Rule to Identify
Triple-Net Lease	RE	Triple-Net	A lease where the Base Rent Rate excludes the full cost of CAMS and Other Rent expenses on a monthly basis.	Real Estate Lease where: ■ Base Rent Rate excludes the full cost of CAMS and Other Rent expenses on a monthly basis ■ CAMS and Other Rent pass through language
True/Operating Lease (FMV)	EQ	FMV	Lease granting the Lessee the option to purchase the assets at the FMV of the lease equipment at the option date. Option may be at the FMV or at a defined percentage of the FMV.	May include the following: ■ True Lease ■ Contains purchase option ■ Contains language referencing Lessee ability to buyout the asset at a date. ■ This is default lease type for non-Real Estate leases

Sample Client

The following is a working Java client that, given credentials and a properly configured IdP, connects to the LeaseAccelerator API using the SAML2 Enhanced Client or Proxy (ECP) profile and submits a FindDeals request to our beta testing environment. This program leverages several open source components – most notably Apache HttpComponents (https://hc.apache.org/), OpenSAML-J (https://wiki.shibboleth.net/confluence/display/OpenSAML/Home/), and Shibbolethized HTTPClient (see http://mvnrepository.com/artifact/de.tudarmstadt.ukp.shibhttpclient/shib-http-client/1.0.0 for the Maven entry and links to the source repository).

```
package com.leaseacc.auth.admin;
```

```
import java.io.BufferedReader;
import java.io.File;
import java.io.IOException;
import java.io.InputStream;
import java.io.InputStreamReader;

import org.apache.commons.io.IOUtils;

import org.apache.http.HttpResponse;
import org.apache.http.HttpEntity;
import org.apache.http.client.ClientProtocolException;
import org.apache.http.client.HttpClient;
import org.apache.http.client.methods.CloseableHttpResponse;
import org.apache.http.client.methods.HttpGet;
import org.apache.http.client.methods.HttpPost;
import org.apache.http.entity.ContentType;
import org.apache.http.entity.mime.MultipartEntityBuilder;
import org.apache.http.entity.mime.content.FileBody;
import org.apache.http.entity.mime.content.StringBody;
import org.apache.http.impl.client.CloseableHttpClient;
import org.apache.http.impl.client.HttpClients;

import org.opensaml.DefaultBootstrap;
import org.opensaml.xml.ConfigurationException;

import de.tudarmstadt.ukp.shibhttpclient.ShibHttpClient;

public class ShibECPTestClient
{
    private static String idpBaseUrl="https://didp.leaseaccelerator.com";
    private static String spUrl="https://b.leaseaccelerator.com";

    private static String userName="yourUserName";
    private static String password="yourPassword";
```

```
    private static String apiUrl = "https://b.leaseaccelerator.com/lease_
accelerator/api/LeaseAccelerator/FindDeals";
    private static String token = "";
    private static String xmlRequestFile = "FindDeals.xml";


    private static InputStream in;


    public static void main(String[] args)
    {
        System.setProperty
("org.apache.commons.logging.Log","org.apache.commons.logging.impl.SimpleLo
g");
        System.setProperty
("org.apache.commons.logging.simplelog.showdatetime","true");
        System.setProperty
("org.apache.commons.logging.simplelog.log.org.apache.http","DEBUG");
        System.setProperty
("org.apache.commons.logging.simplelog.log.org.apache.http.wire","DEBUG");


        try
        {
            DefaultBootstrap.bootstrap();
        }
        catch (ConfigurationException e)
        {
            e.printStackTrace();
        }


        HttpClient client= new ShibHttpClient(idpBaseUrl +
"/idp/profile/SAML2/SOAP/ECP", userName, password);
        HttpGet req = new HttpGet(spUrl + "/auth/api");
        try
        {
            HttpResponse res = client.execute(req);
            InputStream ins= res.getEntity().getContent();


            BufferedReader br= new BufferedReader(new InputStreamReader
(ins));
```

```
            while ((token=br.readLine()) != null)
            {
                System.out.println("Read Line Data  :" + token);
                CloseableHttpClient apiClient = HttpClients.createDefault();
                HttpPost httppost = new HttpPost(apiUrl);

                MultipartEntityBuilder builder =
MultipartEntityBuilder.create();
                builder.addPart("token", new StringBody(token,
ContentType.DEFAULT_TEXT));

                File requestFile = new File(xmlRequestFile);
                builder.addPart("file", new FileBody
(requestFile.getAbsoluteFile()));

                HttpEntity entity = builder.build();

                httppost.setEntity(entity);
                try
                {
                    CloseableHttpResponse responseFromPost =
apiClient.execute(httppost);
                    System.out.println(responseFromPost.toString());
                    in = responseFromPost.getEntity().getContent();
                    String body = IOUtils.toString(in);
                    System.out.println(body);
                }
                catch (ClientProtocolException e)
                {
                    System.out.println(e);
                }
                catch (IOException e)
                {
                    System.out.println(e);
                }
            }
```

```
        }
        catch (IOException e)
        {
            e.printStackTrace();
        }
    }
}
```

The FindDeals.xml file referenced in the above client contains the following request:

```
<APIRequest>
    <Request>
        <RequestId>12345</RequestId>
        <WarningPolicy>Ignore</WarningPolicy>
        <ErrorPolicy>Ignore</ErrorPolicy>
    </Request>
    <Payload>
        <Criteria>
            <ArtifactNumber>*test*</ArtifactNumber>
        </Criteria>
    </Payload>
</APIRequest>
```

Sample Long Life Token Example:

```
petualTokenClient;

import java.io.File;
import java.io.IOException;
import java.io.InputStream;
import java.security.KeyManagementException;
import java.security.NoSuchAlgorithmException;

import javax.net.ssl.SSLContext;

import org.apache.commons.io.IOUtils;
```

```
import org.apache.http.HttpEntity;
import org.apache.http.client.ClientProtocolException;
import org.apache.http.client.methods.CloseableHttpResponse;
import org.apache.http.client.methods.HttpPost;
import org.apache.http.config.Registry;
import org.apache.http.config.RegistryBuilder;
import org.apache.http.conn.socket.ConnectionSocketFactory;
import org.apache.http.conn.socket.PlainConnectionSocketFactory;
import org.apache.http.conn.ssl.SSLConnectionSocketFactory;
import org.apache.http.entity.ContentType;
import org.apache.http.entity.mime.MultipartEntityBuilder;
import org.apache.http.entity.mime.content.FileBody;
import org.apache.http.entity.mime.content.StringBody;
import org.apache.http.impl.client.CloseableHttpClient;
import org.apache.http.impl.client.HttpClients;
import org.apache.http.impl.conn.BasicHttpClientConnectionManager;
import org.apache.http.ssl.SSLContexts;

public class perpetualTokenClient
{
    private static InputStream in;

    public static void main(String[] args)
    {
        //Simple Debug On off for detail info appearing 0 or 1.
Integer debug = 1;

        if (debug == 1)
        {
        System.setProperty
("org.apache.commons.logging.Log","org.apache.commons.logging.impl.SimpleLo
g");
        System.setProperty
("org.apache.commons.logging.simplelog.showdatetime","true");
        System.setProperty
("org.apache.commons.logging.simplelog.log.org.apache.http","DEBUG");
```

```
        System.setProperty
("org.apache.commons.logging.simplelog.log.org.apache.http.wire","DEBUG");
        }
        String token = "ENTER_TOKEN_HERE";
        String operation = "ENTER_OPERATION_HERE_SUCH_AS_
ImportExchangeRates";
        String xmlRequestFile = "C:/path/file_xml_here.xml";
     //Choose Proper URL for testing
        String apiUrl = "https://beta.leaseaccelerator.com/lease_
accelerator/api/LeaseAccelerator/";
        try
        {
            if (token != null)
            {
                if (debug == 1)
                {
                System.out.println("Token Data  :" + token);
                }
                BasicHttpClientConnectionManager clientConnectionManager =
new BasicHttpClientConnectionManager(getRegistry());
                CloseableHttpClient apiClient = HttpClients.custom
().setConnectionManager(clientConnectionManager).build();
                HttpPost httppost = new HttpPost(apiUrl + operation);


                MultipartEntityBuilder builder =
MultipartEntityBuilder.create();
                builder.addPart("token", new StringBody(token,
ContentType.DEFAULT_TEXT));
                builder.addPart("requestId", new StringBody("12345",
ContentType.DEFAULT_TEXT));


                File requestFile = new File(xmlRequestFile);
                builder.addPart("file", new FileBody
(requestFile.getAbsoluteFile()));


                HttpEntity entity = builder.build();


                httppost.setEntity(entity);
```

```
                try
                {
                     CloseableHttpResponse responseFromPost =
apiClient.execute(httppost);
                     if (debug == 1)
                     {
                         System.out.println(responseFromPost.toString());
                     }

                     in = responseFromPost.getEntity().getContent();
                     String body = IOUtils.toString(in, "UTF-8");
                     System.out.println(body);
                }
                catch (ClientProtocolException e)
                {
                    System.out.println(e);
                }
                catch (IOException e)
                {
                    System.out.println(e);
                }
            }

        }
        catch (Exception nsae)
        {
            System.out.println("NoSuchAlgorithmException in
InvokeAPIFromFile: " + nsae.getLocalizedMessage());
        }
        finally
        {
            //end
        }
    }
```

```
    private static Registry<ConnectionSocketFactory> getRegistry() throws
KeyManagementException, NoSuchAlgorithmException {

        SSLContext sslContext = SSLContexts.custom().build();

        SSLConnectionSocketFactory sslConnectionSocketFactory = new
SSLConnectionSocketFactory(sslContext,

                new String[]{"TLSv1.2"}, null,
SSLConnectionSocketFactory.getDefaultHostnameVerifier());

        return RegistryBuilder.<ConnectionSocketFactory>create()

                .register("http",
PlainConnectionSocketFactory.getSocketFactory())

                .register("https", sslConnectionSocketFactory)

                .build();

    }

}
```

Sample - Capture Posted Document XML

Operation: CaptureDocumentId

```
<APIRequest>

       <Request>

              <RequestId>333335</RequestId>

       </Request>

       <Payload>

              <ExternalDocuments>

                     <ExternalDocument>

                            <LedgerEntrySubId>2.1.61489591.61489591
</LedgerEntrySubId>

                            <ExternalDocumentId>POSTED</ExternalDocumentId>

                     </ExternalDocument>

                     <ExternalDocument>

                            <LedgerEntrySubId>2.1.61489591.61489592
</LedgerEntrySubId>

                            <ExternalDocumentId>POSTED</ExternalDocumentId>

                     </ExternalDocument>

              </ExternalDocuments>

       </Payload>

</APIRequest>
```

Sample – FX Rates XML

Operation: FindContacts

```
<APIRequest>
	<Request>
		<RequestId>326542</RequestId>
	</Request>
	<Payload>
		<Rate>
			<ToCurrency>EUR</ToCurrency>
			<FromCurrency>USD</FromCurrency>
			<EffectiveDate>02/01/2024</EffectiveDate>
			<Rate>1.25</Rate>
			<RateType>Spot</RateType>
			<Source>WSJ</Source>
		</Rate>
		<Rate>
			<ToCurrency>PLN</ToCurrency>
			<FromCurrency>USD</FromCurrency>
			<EffectiveDate>02/01/2024</EffectiveDate>
			<Rate>2.25</Rate>
			<RateType>Spot</RateType>
			<Source>WSJ</Source>
		</Rate>
		<Rate>
			<ToCurrency>CAD</ToCurrency>
			<FromCurrency>USD</FromCurrency>
			<EffectiveDate>02/01/2024</EffectiveDate>
			<Rate>0.99</Rate>
			<RateType>Spot</RateType>
			<Source>WSJ</Source>
		</Rate>
	</Payload>
</APIRequest>
<APIResponse>
	<Response>
```

```
            <Status>0</Status>
            <Context>Ok</Context>
            <RequestId>326542</RequestId>
      </Response>
      <Payload>
            <Results></Results>
      </Payload>
</APIResponse>
```

Sample - Find Contacts XML

Operation: FindContacts

```
<APIRequest>
    <Request>
        <RequestId>333335</RequestId>
    </Request>
        <Payload>
            <Contact>
                    <Scope>Person</Scope>
                    <Company>ACME MARKETS INC</Company>
            </Contact>
        </Payload>
</APIRequest>
<APIResponse>
    <Response>
        <Status>0</Status>
        <Context>Ok</Context>
        <RequestId>12345</RequestId>
    </Response>
    <Payload>
        <Contacts>
            <Contact>
                <CompanyId>5</CompanyId>
                <Company>ACME MARKETS INC</Company>
                <Email>syewale@leaseaccelerator.com</Email>
```

```
            <AddressId/>
            <Address1/>
            <Address2/>
            <Phone/>
            <City/>
            <Country/>
            <PostalCode/>
            <StateProvince/>
            <PartyId>14269</PartyId>
            <FullName>Op1</FullName>
            <ContactType/>
            <Url/>
            <Title/>
        </Contact>
        <Contact>
            <CompanyId>5</CompanyId>
            <Company>ACME MARKETS INC</Company>
            <Email>syewale@leaseaccelerator.com</Email>
            <AddressId/>
            <Address1/>
            <Address2/>
            <Phone/>
            <City/>
            <Country/>
            <PostalCode/>
            <StateProvince/>
            <PartyId>14255</PartyId>
            <FullName>Tester2</FullName>
            <ContactType/>
            <Url/>
            <Title/>
        </Contact>
        <Contact>
            <CompanyId>5</CompanyId>
            <Company>ACME MARKETS INC</Company>
```

```
                <Email>syewale@leaseaccelerator.com</Email>
                <AddressId/>
                <Address1/>
                <Address2/>
                <Phone/>
                <City/>
                <Country/>
                <PostalCode/>
                <StateProvince/>
                <PartyId>14256</PartyId>
                <FullName>Tester3</FullName>
                <ContactType/>
                <Url/>
                <Title/>
            </Contact>
        </Contacts>
    </Payload>
</APIResponse>
```

Sample – Get Events for Deal

Operation: GetEventsForDeal

```
<APIRequest>
    <Request>
        <RequestId>20190312</RequestId>
    </Request>
    <Payload>
        <EventCriteria>
            <DealId>25325</DealId>
        </EventCriteria>
    </Payload>
</APIRequest>
<APIResponse>
    <Response>
        <Status>0</Status>
```

```
        <Context>Ok</Context>
        <RequestId>20190312</RequestId>
    </Response>
    <Payload>
        <Events>
            <Event>
                <Id>49257</Id>
                <EventType>GenClassification</EventType>
                <DealId>25325</DealId>
                <UserName>jburney</UserName>
                <Comments/>
                <IsSuperseded>N</IsSuperseded>
                <Timestamp/>
            </Event>
            <Event>
                <Id>49252</Id>
                <EventType>NewClassification</EventType>
                <DealId>25325</DealId>
                <UserName>jburney</UserName>
                <Comments/>
                <IsSuperseded>N</IsSuperseded>
                <Timestamp/>
            </Event>
            <Event>
                <Id>49251</Id>
                <EventType>SummaryChanged</EventType>
                <DealId>25325</DealId>
                <UserName>jburney</UserName>
                <Comments>Changed financing terms</Comments>
                <IsSuperseded>N</IsSuperseded>
                <Timestamp/>
            </Event>
            <Event>
                <Id>49250</Id>
                <EventType>Annotate</EventType>
```

```
                <DealId/>
                <UserName>jburney</UserName>
                <Comments>Changed deal status from NULL to Active</Comments>
                <IsSuperseded>N</IsSuperseded>
                <Timestamp/>
            </Event>
            <Event>
                <Id>49249</Id>
                <EventType>BookCA</EventType>
                <DealId/>
                <UserName>jburney</UserName>
                <Comments/>
                <IsSuperseded>N</IsSuperseded>
                <Timestamp/>
            </Event>
        </Events>
    </Payload>
</APIResponse>
```

Sample – Find Deals

Operation: FindDeals

<APIRequest>

```
    <Request>
        <RequestId>20190312</RequestId>
    </Request>
    <Payload>
        <Criteria>
            <ArtifactNumber></ArtifactNumber>
            <ArtifactType></ArtifactType>
            <ArtifactState></ArtifactState>
            <FromDate></FromDate>
            <ToDate></ToDate>
            <ContactType></ContactType>
            <Company>Acme*</Company>
```

```
                    <City></City>
                    <StateProvince></StateProvince>
                    <Country></Country>
                    <Status>Active</Status>
                    <MaxRows>100</MaxRows>
                </Criteria>
                <TargetArtifact>Deal</TargetArtifact>
        </Payload>
</APIResponse>
```