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Introduction

The 2tCloud Support Center Portal is capable of providing you with your purchase and sales invoices in XML and JSON format. This feature is called "Billing API". The Billing API enables your enterprise resource planning (ERP) system to request invoice details on demand from the 2tCloud Platform. These invoices are sent as structured XML or JSON data, which can then be processed by your ERP system.

There are 2 different endpoints of the API:

- The Purchase Invoice retrieves your purchase invoices for a specified period;
- The Sales Invoice retrieves your sales invoices for a specified period.

1 Access to the API

By default, the Billing API is not enabled. If you would like to use the API and benefit from enhanced invoicing automation, please activate the API via your Support Center Profile page <https://2tcloud.supportcenter.services/profile> on the Your APIs tab you can generate an API key. Once generated you must enter at least on IP-address that will have access. In total you can register two IP-addresses. for instance, one for development/test purposes and one for your production environment.

The screenshot shows the 2tCloud Support Center interface. At the top, there is a navigation bar with the 2tCloud logo, 'Support Center', and user information for 'NIEK GRUIJTHUIJSEN'. Below the navigation bar, there is a 'Profile:' section with a progress indicator. The main content area has a tabbed interface with 'Your APIs' selected. Under 'Your APIs', the 'Settings' sub-tab is active. A message states: 'Please generate an API key to benefit directly from RESTful API integration.' Below this message is a green button labeled 'Generate API key'.

The screenshot shows the 2tCloud Support Center interface after the API key has been generated. The 'Your APIs' tab is still selected, but the 'Billing API' sub-tab is now active. A green message box at the top of the content area says: 'Your API key has been created successfully'. Below this, the 'Settings' sub-tab is active. The 'API Key' field is now populated with a masked key. The 'IP address(es) with access' field is empty, and a message explains: 'To connect to your APIs, you need to add IP addresses that will have access. You can register two addresses, for instance one for development/test purposes and one for your production environment.' Below this message is a green button labeled 'Add IP address'.

2 Requesting invoice data

To request the invoice data for a specific period, choose the Purchase Invoice or Sales Invoice endpoint and select the start- and end date of the invoice period. The url is generated automatically once you enter the end date.

Your APIs

Settings
Billing API

Billing API

Description:
The Billing API can be used to directly import sales or purchase invoices for a specified period into your Enterprise Resource Planning system. Exports are available in XML or JSON format.

Build your URL:

Purchase Invoices Sales Invoices

Base URL: 2tcloud.supportcenter.services

Endpoint URL: /api/invoices/

Start Date: 01-05-2019

End Date: 15-05-2019

HTTP Accept Header: none (defaults to XML)

Your URL:
<https://2tcloud.supportcenter.services/api/invoices/1001056/?startDate=20190501&endDate=20190515>

Congratulations, you are now ready to retrieve your purchase invoice data for May 1st 2019 thru May 15th 2019.
Please download the data in XML format by clicking the link above.

If you wish to retrieve the data in JSON format simply change the HTTP accept header when sending your request to the Billing API.

3 Purchase invoice XML

The structure of the XML is straightforward and easy to read. Some tags require additional information which is given in this chapter.

3.1 Empty elements

Empty XML elements do not have a closing tag. Instead they are self-closing.

```
<AccountID />
```

3.2 Purchase invoice XML structure

The XML returned by the Purchase Invoices endpoint has the following structure. The structure of the Sales Invoices is similar with the exception that it contains information about the invoice from the Partner to one single Customer.

```
<InvoiceResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Invoice>
    <Header>
```

```
<InvoiceID>.....</InvoiceID>
<Date>.....</Date>
<ExpirationDate>.....</ExpirationDate>
<Currency>.....</Currency>
<TermsOfPaymentDays>.....</TermsOfPaymentDays>
<TaxZoneID>.....</TaxZoneID>
<TaxPercentage>.....</TaxPercentage>
<Type>.....</Type>
<TypeIdentifier>.....</TypeIdentifier>
<LanguageCode>.....</LanguageCode>
<Language>.....</Language>
</Header>
<Sender>
  <CompanyName>.....</CompanyName>
  <Address>.....</Address>
  <PostalCode>.....</PostalCode>
  <City>.....</City>
  <CountryCode>.....</CountryCode>
  <Country>.....</Country>
  <Telephone>.....</Telephone>
  <Fax>.....</Fax>
  <ChamberOfCommerce>.....</ChamberOfCommerce>
  <BankAccount>.....</BankAccount>
  <IBAN>.....</IBAN>
  <BIC>.....</BIC>
  <VATNumber>.....</VATNumber>
  <Website>.....</Website>
  <Logo>.....</Logo>
</Sender>
<Receiver>
  <AccountID>.....</AccountID>
  <CustomerNumber>.....</CustomerNumber>
  <CompanyName>.....</CompanyName>
  <VATNumber>.....</VATNumber>
  <ContactFirstName>.....</ContactFirstName>
  <ContactMiddleName>.....</ContactMiddleName>
  <ContactLastName>.....</ContactLastName>
  <Street>.....</Street>
  <Zip>.....</Zip>
  <City>.....</City>
  <Country>.....</Country>
  <Telephone>.....</Telephone>
  <Email>.....</Email>
</Receiver>
<Customers>
  <Customer>
    <AccountID>.....</AccountID>
    <CustomerNumber>.....</CustomerNumber>
    <CompanyName>.....</CompanyName>
    <Subscriptions>
      <Subscription>
```

```

<SubscriptionID>.....</SubscriptionID>
<SubscriptionName>.....</SubscriptionName>
<StartDate>.....</StartDate>
  <LinItems>
    <LinItem>
      <UID>.....</UID>
      <Description>..... </Description>
      <Quantity>.....</Quantity>
      <UnitPrice>.....</UnitPrice>
      <Discount>.....</Discount>
      <ExtendedPrice>.....</ExtendedPrice>
      <VAT>.....</VAT>
      <TaxZoneID>.....</TaxZoneID>
      <TaxPercentage>.....</TaxPercentage>
      <StartDate>.....</StartDate>
      <EndDate>.....</EndDate>
      <Duration>.....</Duration>
      <DurationType>.....</DurationType>
      <SKU />.....</SKU />
    </LinItem>
  </LinItems>
</Subscription>
</Subscriptions>
</Customer>
</Customers>
<Totals>
  <TotalExcludingVAT>.....</TotalExcludingVAT>
  <TotalVAT>.....</TotalVAT>
  <TotalIncludingVAT>.....</TotalIncludingVAT>
</Totals>
</Invoice>
</InvoiceResponse>

```

<InvoiceResponse>

This is the root element of the XML response, containing one or more <Invoices> depending on the start- and end date selected.

<Invoice>

Element containing information about one single invoice.

<Header>

Element with basic information about the <Invoice>. The <Header> has the following attributes:

- <InvoiceID> The identifying number of the invoice
- <Date> Invoice date
- <ExpirationDate> Due date of the invoice
- <Currency> Currency
- <TermsOfPaymentDays> Terms of payment days agreed upon
- <Type> Invoice or credit

<TypeIdentifier> Code corresponding to the type
<LanguageCode> Language code used by Copaco to create the printed version of the invoice
<Language> Print out name of the language used by Copaco to create the printed version of the invoice

<Sender>

Element with information about the <Sender>. The <Sender> has the following attributes:

<CompanyName>
<Address>
<PostalCode>
<City>
<CountryCode>
<Country>
<Telephone>
<Fax>
<ChamberOfCommerce>
<BankAccount>
<IBAN>
<BIC>
<VATNumber>
<Website>
<Logo> url used by Copaco to place the company logo on the print version of the invoice

<Receiver>

<AccountID> # Corresponding to the ID in the 2tCloud Portal
<CustomerNumber> # Corresponding with the Copaco customer account number
<CompanyName> Name of the Partner
<VATNumber> VAT number of the Partner
<ContactFirstName> Billing contact first name
<ContactMiddleName> Billing contact middle name
<ContactLastName> Billing contact last name
<Street> Corresponding street the partner registered at the chamber of commerce
<Zip> Corresponding zip code the partner registered at the chamber of commerce
<City> Corresponding city the partner registered at the chamber of commerce
<Country> Corresponding country the partner registered at the chamber of commerce
<Telephone> Billing contact telephone number
<Email> Address the invoice is send to

<Customers>

Element with information about one or more <Customers> and their <Subscriptions>

<Customer>

Element with information about the <Customer>. The <Customer> has the following attributes:

<AccountID> # Corresponding to the ID in the 2tCloud Portal
<CustomerNumber> # Can be used by the Partner for reference to own ERP system. This number is set in the Control Panel at the additional information tab in the billing section
<CompanyName> Name of the Customer

<Subscriptions>

Element with information about one or more <Subscriptions> and <LineItems> inside.

<Subscription>

Element with information about the <Subscription>. The <Subscription> has the following attributes:

<SubscriptionID> # Corresponding to the subscription in the Platform

<SubscriptionName> Name of the subscription

<StartDate> Initial start date of the subscription

<LineItems>

Element with information about one or more <LineItems> belonging to the <Subscription>.

<LineItem>

Element with information about the <LineItem>. The <LineItem> has the following attributes:

<UID> The first UID is corresponding to the identifying number configured in the plan starting with a P form 'plan'. The second and every UID after until the next subscription starts with a R from 'resource'. A resource is an addition to the initial subscription.

<Description> First line item contains the subscription # and description.

Successive line items contain the resource name of the of the line item belonging to the subscription

<Quantity> First quantity contains the # of in the subscription included resources. Successive line items contain # of resources of the line item belonging to the subscription

<UnitPrice> Price of the line item the Customer can order the item for

<Discount> The total discount of all included resources

<ExtendedPrice> The amount to be paid for the line item

<VAT> amount of VAT applicable for the line item

<TaxZoneID> Corresponding to the ID configured in the Platform at the subscription level

<TaxPercentage> Percentage applicable to the line item

<StartDate> Start date of the subscription period

<EndDate> End date of the subscription period

<Duration> Duration of one subscription period

<DurationType> Duration type e.g. Month(s), Year

<SKU> By the Partner configured SKU number

<Totals>

Element with information about the total amount the Partner has to pay over all <Customers>.

<Totals> has the following attributes:

<TotalExcludingVAT> Total amount in Euro excluding VAT

<TotalVAT> Total VAT in Euro, exclusive of telecommunication services

<TotalIncludingVAT> Total amount including VAT

3.3 Calculating the correctness of the line item

The formula to calculate the line item:

$$((\text{Quantity} * \text{UnitPrice}) - \text{Discount}) * \text{Duration} = \text{ExtendedPrice}$$

3.4 Calculating the correctness of invoice totals

3.4.1 Total excluding VAT

The formula to calculate the total excluding VAT:

Total of <ExtendedPrice> = <TotalExcludingVAT>

3.4.2 Total VAT

The formula to calculate the total VAT:

<TotalVAT> is the sum of all line items where <VAT> amount is calculated, for all Services for which VAT is applicable.

3.4.3 Total including VAT

<TotalIncludingVAT> = <TotalExcludingVAT> + <TotalVAT>

3.4.4 Telecommunication Services

VAT is applicable to all Services excluding Telecommunication Services such as Internet Connectivity and SIP Trunk. These services are subject to VAT Reverse-charged (Btw verlegd) when sold via the Partner to a Customer. If the Partner consumes these services within the own organization VAT is applicable.

Please note that: Copaco is responsible for selecting the tax zone and for generating a correct invoice for Telecommunication Services to the Partner and Customers regarding these services. The Partner is responsible to register a Customer under the Partner account when he wants to use these services for his own benefit.

3.4.5 When the invoice crosses a border

VAT Reverse Charge (Btw verlegd) is applicable to all services when the invoice crosses a border. For instance, when your office is registered in Belgium and you sell services to Customers in Luxembourg.

Please note that: The Partner is responsible for selecting the correct country of the Customer and for selecting the tax zone which influences the calculation of VAT on the invoice for all Services where VAT is applicable.

3.4.6 Delegations / representatives of a state or embassy

Delegations / representatives of a state such as a king or prince, or an embassy, are also exempt from VAT (this has not been shifted but is actually 0%). This only concerns countries that are members of NATO.

Please note that: The Partner is responsible for selecting the correct country of the Customer and for selecting the tax zone which influences the calculation of VAT on the invoice.

3.5 Billing API remote support

The Support Team will remediate issue related to the API, initiated through contacting the Support Team after a call ticket has been created and prioritized based on severity. The Support Team will attempt to resolve the issue remotely, escalating to Level 2 Support, then Level 3 Support as required.

3.6 Contacting the Support Team

Before contacting the Support Team, please be prepared to provide your company name, contact details, a detailed description of the issue, and the name of your companies designated Primary Customer Contact.

Web form: 2tcloud.supportcenter.services

Phone number: +31 (0)40 2 306 205 (only after registering ticket with all requested information)

Monday to Friday: 08h00 – 18h00 CET

Reported problems will be categorized based on the guidelines in the Master Service Level Agreement.