

INTEGRATING AVALARA WITH FRONTIER



Dehn Loder | December 11, 2019

- All participants are muted.
- Please post your questions in Chat or use the Q&A tab. We will answer them at the end of the presentation.
- This session is being recorded. The replay link will be sent to all registered customers.
- Presenters:
 - **Christian Shaw**
Partner Launch Manager
Avalara
 - **Dehn Loder**
Friedman Corporation

- Thank you to Avalara for their presentation!
- This presentation discusses the integration of AvaTax with Frontier
 - Why we chose Avalara as a partner
 - What you need
 - How it works
 - Implementation decisions
 - Setup steps
 - Operations
 - Future roadmap



Avalara



INTRODUCING AVALARA AVATAX

Christian Shaw – Partner Launch Manager

December 11, 2019

Agenda

- What Is Nexus?
- Tax Compliance Challenges
- Avalara Demo
- Q&A

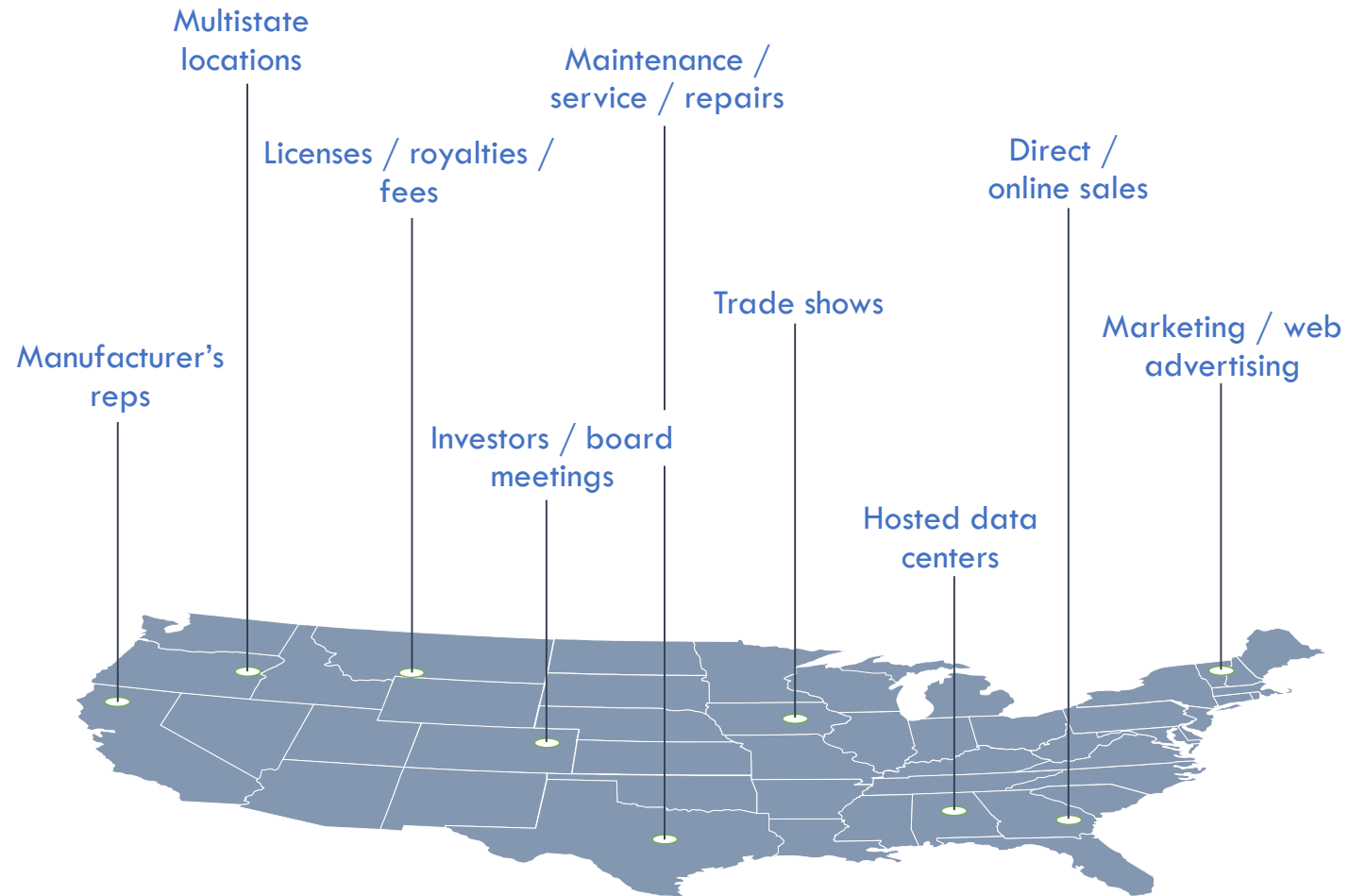
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WHAT IS CHALLENGE OF TAX NEXUS?

THE NEXUS CHALLENGE

- > Owned / leased real property
- > Field sales / service staff
- > Inventory location
- > Affiliates
- > Economic nexus



WHAT WAS *SOUTH DAKOTA VS. WAYFAIR, INC.* ABOUT?



South Dakota

 wayfair

- South Dakota asked the U.S. Supreme Court to overturn its long-standing physical presence nexus rule.
- **SCOTUS ruled in favor of South Dakota. The state can impose sales tax obligations on out-of-state transactions.**
- **Affected:** Remote sellers not currently registered with the state who meet sales volume and/or transaction count threshold requirements
- **Impact:** States can now implement economic nexus laws – businesses don't need a physical presence to be required to collect & remit sales tax. **30+ states have already declared economic nexus laws since the ruling.**

ECONOMIC NEXUS

WHAT IS IT?

Economic nexus is a tax collection obligation imposed on sellers based on their level of economic activity within a state.

Unlike physical presence, it is based **entirely** on sales revenue, transaction volume, or both.

Like most sales tax laws, economic nexus criteria vary by state. All aim to level the playing field between non-collecting out-of-state sellers and brick-and-mortar businesses.

STATES IN ACTION POST-RULING

Prepare your clients for this new wave of changes

Economic nexus laws by state

as of December 2, 2019



- **States enforcing economic nexus starting:**
 - **July 1, 2018** – Hawaii, Maine, Vermont
 - **September 1, 2018** – Mississippi
 - **September 30, 2018** – Michigan
 - **October 1, 2018** – Alabama, Illinois, Indiana, Kentucky, Maryland, Minnesota, New Jersey, North Dakota, Washington, Wisconsin
 - **November 1, 2018** – North Carolina, South Dakota
 - **December 1, 2018** – Colorado, Connecticut
 - **January 1, 2019** – Georgia, Iowa, Louisiana, Nebraska, Utah, West Virginia
 - **January 15, 2019** – New York
 - **February 1, 2019** – Wyoming
 - **April 1, 2019** – California
 - **October 1, 2019** – Texas
- All of these states have different statutory start dates and thresholds. See Avalara's [online grid](#) for updates.*

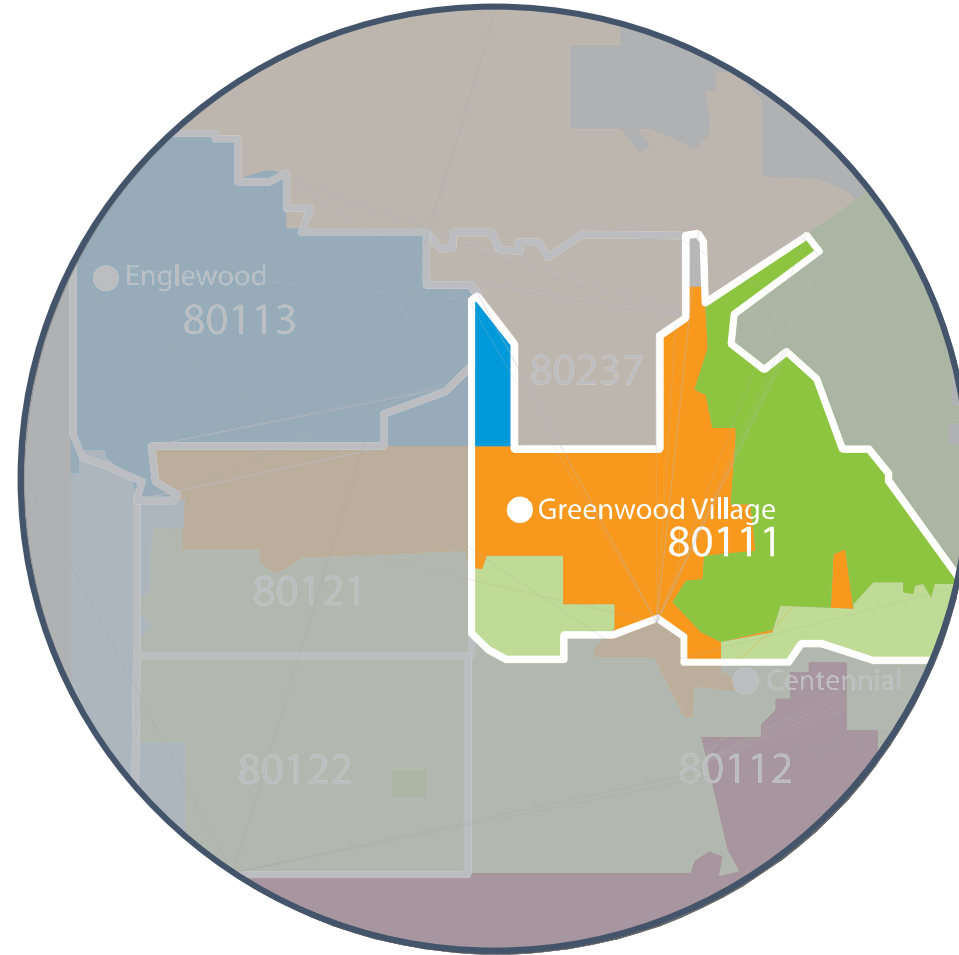
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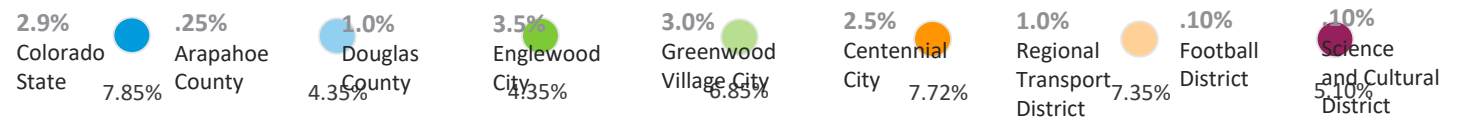
CALCULATION

The jurisdiction assignment challenge

- > 12,000+ U.S. jurisdictions
- > Boundaries may overlap
- > ZIP code-based jurisdiction assignment is inaccurate



80111 taxes



The product taxability challenge

- > Product definitions vary by jurisdiction
- > Complex product-based tax exemptions and special rates
- > Taxability may vary based on how the product is used



Tree trimming in California

Taxable
With lights

Exempt
Labor only



Takeout in Colorado

Taxable
Straws,
cup lids

Exempt
Cups



Donuts in Texas

Taxable
< 5

Exempt
> 6



Snow removal in Midwest

Taxable
Ohio

Exempt
Illinois



Bagels in New York

Taxable
Sliced

Exempt
Whole



Candy bars in Indiana

Taxable
Snickers

Exempt
KitKat, Twix

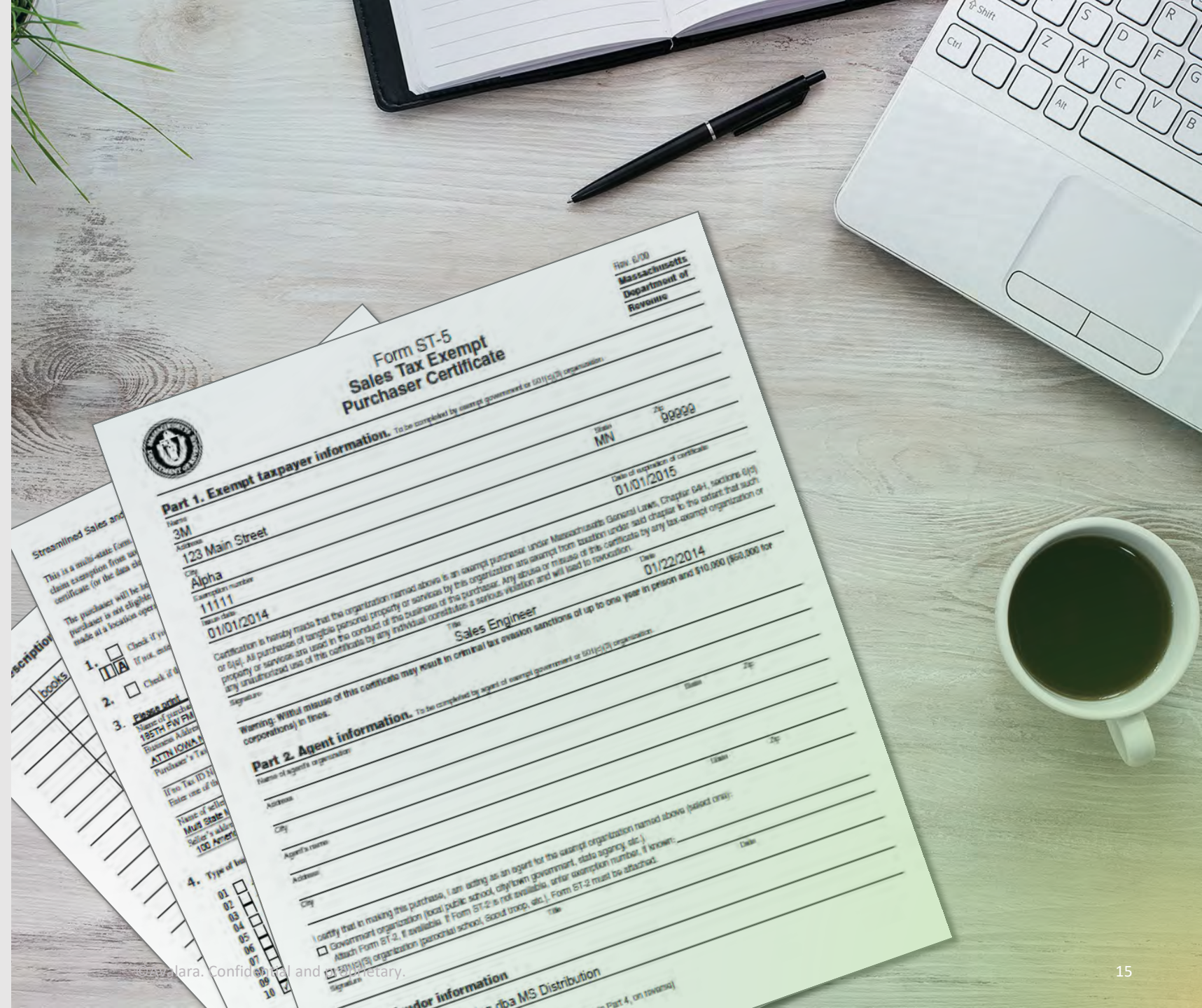
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EXEMPTION SALES

The exemption certificate challenge

- Employees find it difficult to collect them
- Employees are not trained to validate them properly
- Certificate retrieval is time consuming and hard
- A single missing certificate could cost much more than the taxes you failed to collect



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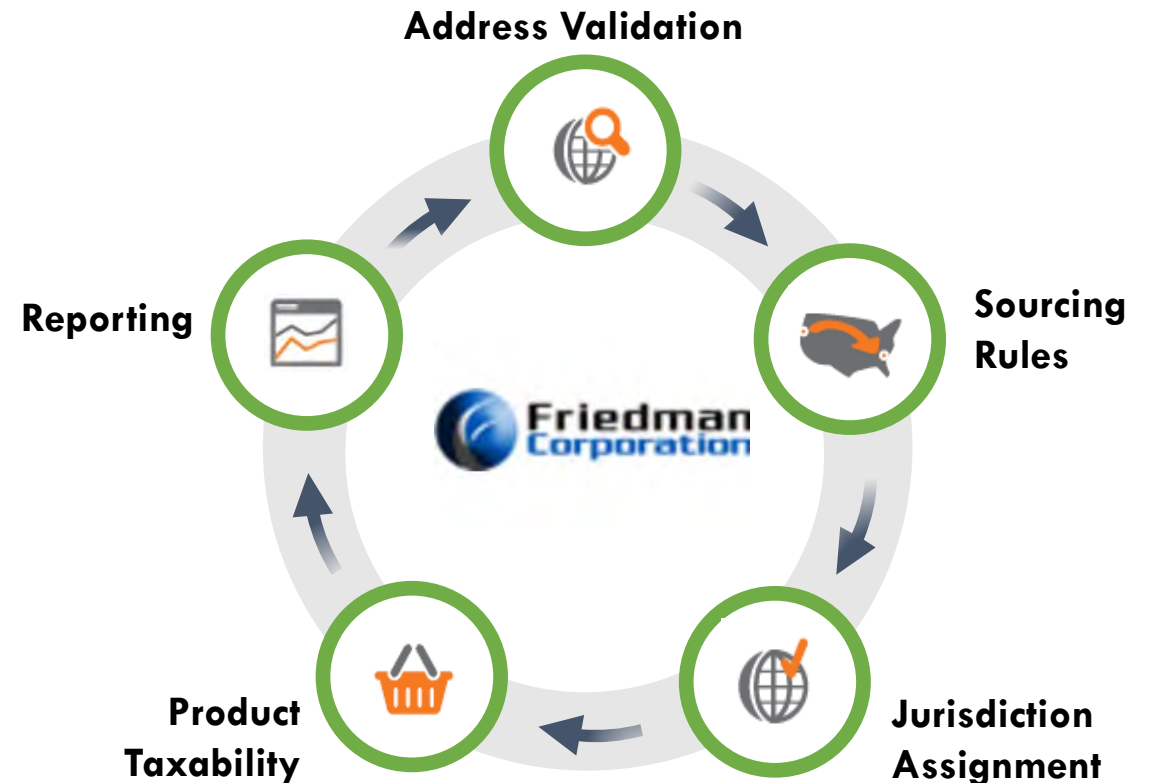


FRIEDMAN FRONTIER AND AVALARA

AVALARA AVATAX

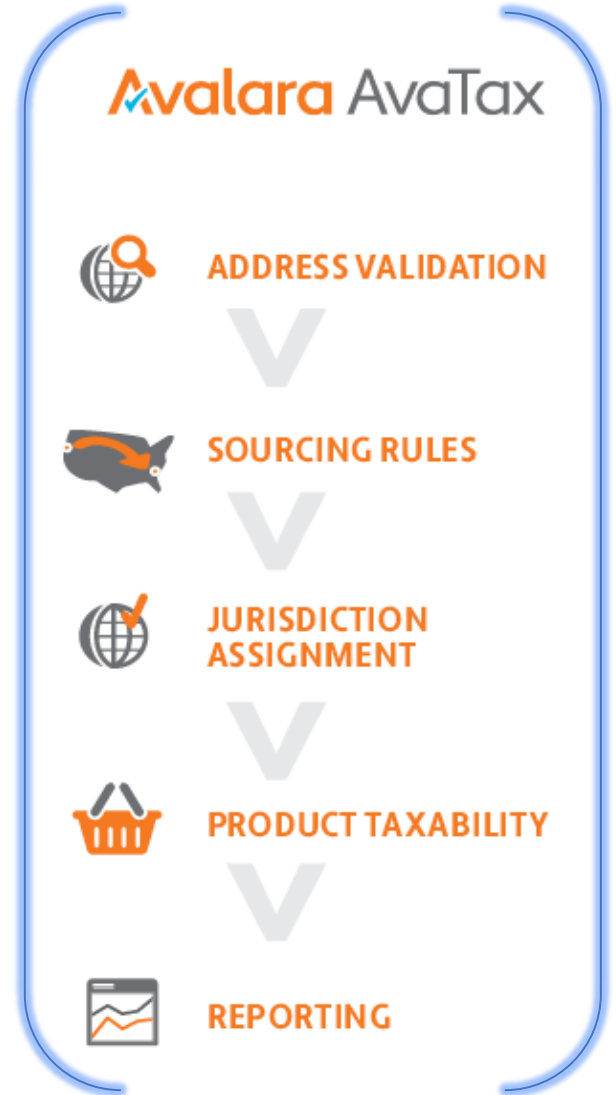
Sales tax calculation

- Reduces risk of exposure
- Eliminates tax research and maintenance
- Reduces implementation time and cost through integration



AVALARA SALES TAX SUITE

End-to-end compliance



Avalara CertCapture



Avalara Returns



Avalara



PRODUCT DEMO

WHY AVALARA?

We had choices

WHY AVALARA AVATAX?

- (Almost) zero IBM i footprint – web service
- Always up to date
- High performance and scalable
- Excellent support from Avalara
- Accessible pricing for our Frontier customers, from small to large

**As of 25 November 2019
the Frontier integration to AvaTax
is certified by Avalara.**



WHAT YOU NEED TO GET STARTED

Pre-requisites, accounts, Frontier ECs...

- IBM i release: **7.2** or higher
- Frontier release: **3.3.x** or higher strongly recommended
 - 4.1 has all this in base
 - Earlier releases need retrofit effort, see “Frontier release support” on next slide
- Your IBM i partition must be able to access the internet
 - Communications with the Avalara web service is via HTTPS
- Special considerations:
 - Using VAT (TAXVS='V')? **WAIT**: we haven't finished VAT support yet
 - Using Vertex (/O or /L)? We need to talk.

- Tax rework and Avalara integration (EC 52679) is BASE in Frontier 4.1.0.
- For any Frontier release, the Avalara AvaTax service is chargeable *by Avalara*.
- Tax rework and Avalara integration can be installed on earlier releases, but not for free; request a quote.
 - You might be able to handle the RPG side yourself, depending on your local mods
 - From us, you will need custom retrofit builds of the UI
- Retrofit effort by release:
 - 4.1.x – no retrofit needed, already BASE
 - 4.0.x – relatively small effort
 - 3.3.x – moderate but acceptable, quite a few dependent ECs
 - 3.2.x – heavy, lots of co-reqs, consider upgrading to 4.1
 - 3.1.x and earlier – *outrageous, do not attempt*, upgrade would be easier.

- The “sales tax rework” EC, developed against a 4.1.x release code base
 - Not all about Avalara; we addressed technical debt, too
- **This is base in Frontier 4.1.** This EC is needed if your are 4.0.x or earlier.
- Moderately invasive: has DB, RPG, CMD, PRTF and SOE UI changes and additions
 - New **Entity Use Code** data element for customers and sales orders
 - Lots of recompile-only actions
 - Updated WAR files
- Can be installed and tested before implementing Avatax.
 - It supports the “classic” TG10 tax tables you use today,

- IBM i library downloadable from Avalara
 - Fairly slick automated install
- SDK installation guide has instructions for ensuring you can run HTTPS in the IBM i.
- You will need at least 1 copy of this library; 2 are recommended
 - Production *versus* Test
 - We'll talk about this in **Technical setup tasks**

- You can sign up for a free “trial” account at their website
 - 60 days of trial access to production, single ID only
 - No filing capabilities, some functions not available
 - Use trial account for evaluation, not for serious implementation
- Implementing for real? Talk to Avalara to get an account created
 - Both Production and Sandbox access
 - Multiple users can be set up in both environments
 - Full function

HOW IT WORKS

The architecture

EC 52679 made the OTXCALC program the "one stop" for SO sales tax calculations

Frontier at large
OE90 , ISLS, INV001, ORD030...

IN: Order & suffix OUT: Summary by imposition

OTX1 Tax config by division
OTXCP

Order and Masterfile info
OH O2 O4 O6
CM CM1 CM3 CM5

OTXCALC
Calculate sales tax

OTXCALC maintains these result tables.

OTXHP Tax request header
OTXSP Tax summary by imposition
OTXDP Tax detail (by line item)

TGP
TG10 Tax tables

OTXBASE
*BASE plugin

OTXCALC decides which plugin to call. All plugins use same parameters.

OTXAVT
Avalara plugin

SDK library (AVATXR2)

REST over HTTPS

AvaTax Tax Calculation Web Service



IMPLEMENTATION DECISIONS

Things to think about sooner rather than later

- You can exempt customers from tax in two places
 - In Frontier, using a non-blank Entity Use Code
 - In Avalara, using Exemptions Management
- Which is best? You decide...
 - But don't say "why not both?"

In Frontier

- Controlled in Customer master etc.
- You are responsible for managing certificates, expiry dates, and compliance
 - Avalara will do what you say
- You can override taxability on an order-by-order basis (ad hoc)
- Good enough for small organizations

In Avalara Avatax

- Controlled by Cust ID in Avalara
- Can do 1-time exemptions based on Purchase Order (special rule)
- Certificates, compliance and Expiry managed by Avalara
 - See also *Avalara CertCapture* which is cool.
- In Frontier, set all customers taxable everywhere
 - Less opportunity for ad-hoc overrides
- Better for customers that have a “tax department”

TECHNICAL SETUP TASKS

Library lists, job descriptions and other sysadmin stuff

- Library you must install on your IBM i to use Avatax with Frontier.
- Provides an RPG ILE interface to the Avalara web services
- You can get the PDF for the latest SDK version here:
<https://github.com/avadev/AvaTax-REST-V2-RPGLE-SDK>
 - **Use the install/upgrade directions in the document**
 - Bootstraps via an FTP download from Avalara
 - End of document has net changes for the release
- Make at least 2 copies of this library
 - One for production, one for test...
 - E.g. **AVATXR2** and **AVATXR2T**

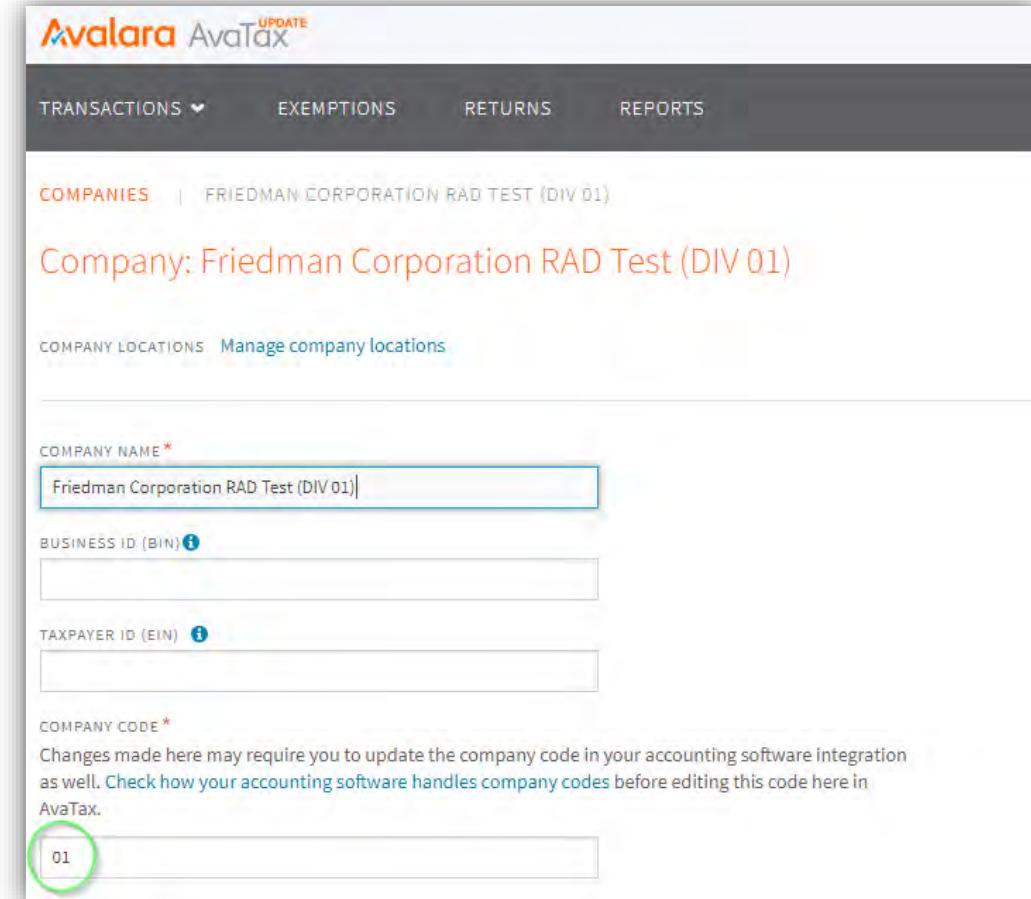
- **Include the AVATXR2/AVATXR2T library in your library lists**
 - FRNBATCH job descriptions
 - FRNASYNC job descriptions
- It can be anywhere
 - *After* the data library (FRNDTAXxx, FRNTSTxxx)
 - *Before* QTEMP
- Not using Avatax yet? It does no harm to have the SDK in the library list.

APPLICATION SETUP TASKS

Avalara, Avalara SDK, and Frontier

- A Frontier **division** maps to an Avalara **company code**
 - One-to-one correspondence: Division '01' is Avalara company '01' &c
- All sales tax controls are by Frontier **division**. By division, you control
 - How taxes are calculated (Avalara, or “base”)
 - How products are identified for tax purposes (product tax codes)
- Major setup areas
 - WEB: Avalara Avatax Web Console: Define Companies
 - IBM i: Avalara RV2 SDK System Control
 - IBM i: Frontier
 - Division and warehouse address setup
 - OTX1
 - Product tax code mapping
 - Entity use codes

- For each division that will use Avalara Avatax, set up the corresponding Avalara Company
 - You will be prompted to identify where this company collects taxes
 - You can always maintain this later
 - You don't need to worry about company locations



Avalara AvaTax ^{UPDATE}

TRANSACTIONS ▾ EXEMPTIONS RETURNS REPORTS

COMPANIES | FRIEDMAN CORPORATION RAD TEST (DIV 01)

Company: Friedman Corporation RAD Test (DIV 01)

COMPANY LOCATIONS [Manage company locations](#)

COMPANY NAME *

BUSINESS ID (BIN) ⓘ

TAXPAYER ID (EIN) ⓘ

COMPANY CODE *
Changes made here may require you to update the company code in your accounting software integration as well. Check how your accounting software handles company codes before editing this code here in AvaTax.

The Avalara COMPANY CODE is your Frontier DIVISION

- Use the **RV2** command to access the SDK Main Menu
 - Option 1, Maintenance Menu
 - Option 2, Maintain System Control File
- For each Frontier Division that will use AvaTax, set up control records for the same named Company.
 - You need two control records: one for **commit**, one for **create**

The SDK installation PDF contains instructions for how to put your Avalara credentials in these control records

<https://github.com/avadev/AvaTax-REST-V2-RPGLE-SDK>

```
RV2001R          Maintain Avalara System Control File          12/04/19
                                                           17:28:44
Type option, press Enter.
 2=Edit  3=Copy  4=Delete  5=Display  T=Test Credentials

Opt Company Code      Operation      Environment      Active
-  01                  commit        Sandbox          Y
-  01                  create        Sandbox          Y
```

- AvaTax wants clean divisional and shipping warehouse addresses
 - You will get “tax holds” if these are not set.
 - Be precise with these.
- For each Frontier division that will use AvaTax:
 - **VS04** (Division Master Maintenance)
 - Set the legal address of your Frontier division
- For each shipping warehouse in the divisions that will use AvaTax:
 - **VS02** (Warehouse Master Maintenance)
 - Set the real physical address of the shipping warehouse

- OTX1 allows you to set what tax “plugin” is used by division
 - *BASE is the traditional TG10-based calculation, and is the default
 - For Avalara (and others) it allows you to assign **default product tax codes**, too

```
LODER                                TAX APPLICATION MAINTENANCE SCREEN                                12/04/19
                                                                              12:56:01

This parameter is used to determine the tax application used to
calculate taxes for division 01 DIVISION 01

Tax application                       AVALARA (*BASE, VERTEX, or AVALARA)
Log tax details                        Y (Y or N)
Default tax code for products          P0000000
Default tax code for charges           FR000000

OTX1 Division 01
F3=Exit
```

- Traditionally in Frontier we identified products as taxable, or non-taxable at the inventory-segment level
- This is not good enough when crossing state boundaries
- For best results, Avalara wants both
 - Your SKU for record keeping, -and-
 - A **product tax code**
- A product tax code classifies the product, charge or service for the purposes of sales tax calculation
 - Similar to the way a harmonized code (HS) is used to classify commodities for shipment and tariffs.

- Avalara has an extensive list of product tax codes
 - Get the list here: <https://taxcode.avatax.avalara.com/>
- Examples:
 - P0000000 = Tangible personal property
 - Most of you can use this for you products
 - FR010000 = Delivery by company vehicle
 - FR020100 = Shipping Only - common carrier - FOB destination
 - PA020100 = Agricultural-commercial use-Machinery and Equipment
- For best results, we need to send these codes to AvaTax...

- EC 52679 introduces **Product Tax Code Mapping**
 - Maps products, product classes, product lines to “product tax codes”
 - Maps alpha codes (misc charges) to product tax codes
- For Products, many of you can just assign the global default of P0000000 (Tangible personal property) in OTX1 and be done.
- For Charges (alpha codes and NC ‘2’ products), you will want to map those to the right product tax codes e.g.:
 - Alpha code ‘FRT’ → FR020100 (Shipping, common carrier, FOB destination)

Product Data Management

- Product Master Maintenance
- Product Notes Maintenance
- Product Tax Code Mapping Maintenance**

System: Inventory Segment Audit

Friedman Corporation | RADCUR2 | [Logout](#)

01

Product Tax Code Mapping Maintenance

Division: 01 | Mapping Type: [dropdown] | From Value: [input] | [Go](#)

[Delete](#)

Division	Mapping Type	Product Tax Code	Last maintenance date	Last Maintenance
----------	--------------	------------------	-----------------------	------------------

- 0 - Product
- 1 - Product Class
- 2 - Product Line
- 9 - Product Default
- 10 - Alpha Code
- 11 - Alpha Code, Charge 1
- 12 - Alpha Code, Charge 2
- 13 - Alpha Code, Charge 3
- 14 - Alpha Code, Handling
- 19 - Alpha Code, Default

- New with EC 52679
- Up-to-5-character code **indicating *why* a customer *MIGHT* be exempt**
- Present in customer master, customer master address overrides, and sales orders
- Defaults onto sales order at order creation, may be overridden
- A non-blank entity use code means a lot to Avalara: can trigger
 - Sales tax exemptions
 - Custom tax logic in Avalara

- New note file “EU” defines valid entity use codes
 - Blank is always valid
- These codes **here →**
are meaningful to Avalara
- Most of our customers will use
 - G – Resale
 - I – Industrial production/manufacturer
- You can set up your own custom codes, too
 - Backed by custom Avalara rules

Entity use code	Exemption reason
A	Federal government (US only)
B	State government
C	Tribal government
D	Foreign diplomat
E	Charitable organization
F	Religious organization
G	Resale
H	Agricultural production
I	Industrial production or manufacturers
J	Direct pay permit
K	Direct mail
L	Other or custom
M	Educational organization
N	Local government
P	Commercial aquaculture (Canada only)
Q	Commercial fishery (Canada only)
R	Non-resident (Canada only)

- Find entity use codes in Frontier in these places:
- Master files
 - Customer → Division Customer Maintenance
 - Customer → Customer Address Override Maintenance
 - Customer → Tax Jurisdiction Maintenance
- Sales orders
 - Sales → Sales Order Header (defaults form customer selection)

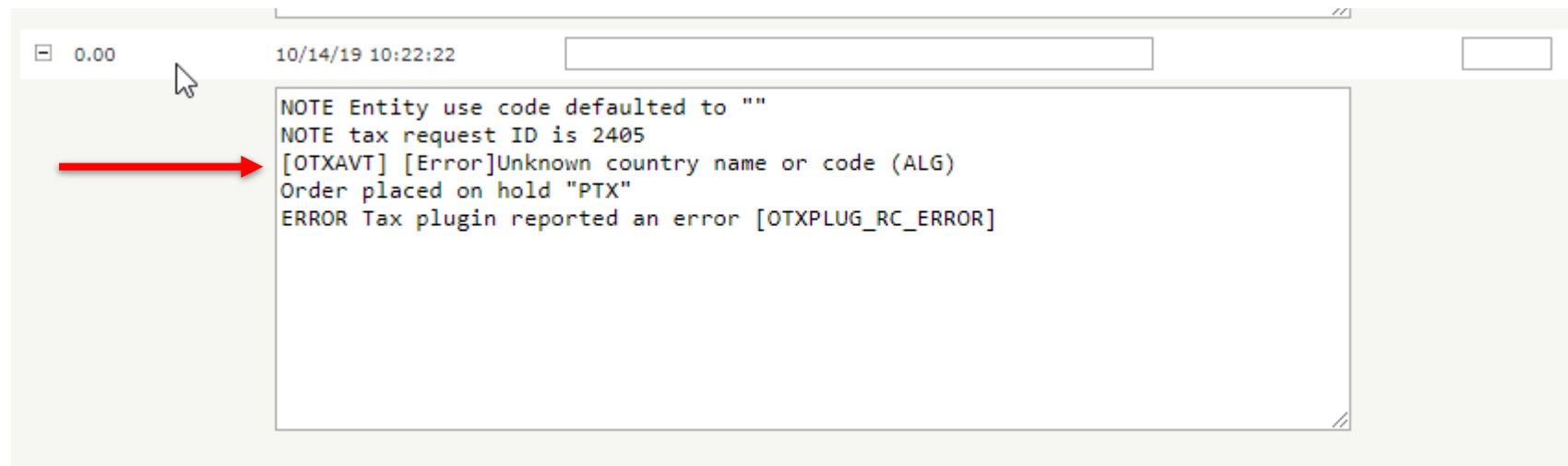
OPERATIONS

What happens when you process sales orders

- Like always, sales taxes are calculated “on the fly” whenever order totals are requested
 - Using whatever “plugin” you have selected for the division
- There is a new Pricing hold code: **TX**
 - Set up “TX” in the CH notefile as “Sales tax hold”.
 - Applied to the order if there is an error calculating taxes
 - Pricing hold because we don’t know if the order total is valid
 - A **P-TX** hold won’t overwrite other pricing holds

- Library list problems
 - You don't have the Avatax SDK in your library list
- AvaTax SDK Control file not set up correctly
 - Bad credentials
 - Missing **create** or **commit** control records for your division
- Really bad address data
 - If you have nonsensical city/state/zipcode address data, Avalara will throw an error.
- Communications down
 - Not that common these days

- When sales taxes are calculated, we make a special entry in Order Activity Notes:
 - Item 0.00 (Header)
 - User “*TAX”
- You can see tax-related errors there
 - “OTXAVT” is the Avalara AvaTax “plugin” program



```
0.00 10/14/19 10:22:22  
NOTE Entity use code defaulted to ""  
NOTE tax request ID is 2405  
[OTXAVT] [Error]Unknown country name or code (ALG)  
Order placed on hold "PTX"  
ERROR Tax plugin reported an error [OTXPLUG_RC_ERROR]
```


- Fix the problem(s) on the order(s)
- Use **Sales Order Hold Maintenance** to select orders with Hold code **P** and Reason **TX**
 - Release the order(s)
- Releasing the order will
 - Clear the P-TX hold
 - Run the order through OEPR again; OEPR will re-calculate taxes.
 - If you still have tax issues, the order will go back on P-TX hold.

- Prior to sales order invoicing
 - We create ***SalesOrder*** documents in Avalara whenever we need taxes for an order; taxes are returned.
 - We do **not** commit *SalesOrder* documents
 - Avalara does not charge for uncommitted *SalesOrder* documents
 - Uncommitted transactions don't show up in Avalara (Avalara technical support can access recent ones).
 - NOTE: eQuote uses the exact same infrastructure!
- At time of sales order invoicing
 - We create a ***SalesInvoice*** document in Avalara; taxes are returned.
 - We **commit** that same *SalesInvoice* document
 - The returned taxes are written to SFP (SFYTD)
 - Committed *SalesInvoice* documents show up in Avalara, and can contribute to reporting and returns
 - Committed *SalesInvoice* documents are subject to transaction charges.

- Nothing has changed here, *yet*
 - Inquiries, Acknowledgements, ASNs and Online Order Totals show a total tax line
 - Invoices show the detailed breakdown by jurisdiction
- We do store the tax breakdown for future use in new table **OTXSP**
 - You can read this today
 - We'll be doing things with it in the future

- Stores tax breakdown for both sales order and invoices
 - True for any tax plugin, AVALARA or *BASE


```
select ORD#, SUFX, INV#, INVDTE, SEQ, JST, TID, ACAK, BASETX, BASENT, BASEEX, RATE, TAX, JCODE, JDESC
from OTXSP
where ORD# = 55573471 and SUFX = 0
```

ORD#	SUFX	INV#	INVDTE	SEQ	JST	TID	ACAK	BASETX	BASENT	BASEEX	RATE	TAX	JCODE	JDESC
55573471	0		0001-01-01	1	CA	06	TAX	15.00	799.90	0.00	0.06000	0.90	06	CALIFORNIA
55573471	0		0001-01-01	2	CA	055	TAX	15.00	799.90	0.00	0.00250	0.04	055	NAPA
55573471	0		0001-01-01	3	CA	EMTLO	TAX	15.00	799.90	0.00	0.01000	0.15	EMTLO	NAPA CO LOCAL TAX SL
55573471	0		0001-01-01	4	CA	EMAX0	TAX	15.00	799.90	0.00	0.00500	0.08	EMAX0	NAPA COUNTY DISTRICT TAX SP

INVOICES APPEAR IN AVALARA AVATAX

TRANSACTIONS | FRIEDMAN CORPORATION RAD TEST (DIV 01)

Sales invoice: 000001776 2019-11-22

 [Edit document details](#)

Invoice detail		Additional info		Customer info	
DOCUMENT CODE	000001776 2019-11-22	EXEMPTION CERTIFICATE APPLIED	No	ENTITY USE CODE	None
STATUS	Committed	IMPORTER OF RECORD?	No	CUSTOMER	DXLAVT
DOCUMENT DATE	11/22/2019	PURCHASE ORDER	TP-DATE 1		
TAX DATE	10/31/2019	CURRENCY	USD		
COMPANY	Friedman Corporation RAD Test (DIV 01)	DISCOUNT	0		
LOCATION CODE	02				







SHIP FROM 1 PARKWAY NORTH DEERFIELD, IL 60015 US
 SHIP TO 911 11th St Se Washington, DC 20003-2813 US

	AMOUNT	DISCOUNT	NOT TAXED	TAXABLE	TAXES/FEES	TOTAL
Tax for one or more lines in this document was calculated based on a tax date different than the document date.						
	297.00	0.00	0.00	297.00	17.82	314.82

Tax summary

Line items

[+ Add a line item](#) [% Calculate tax](#)

TAX DETAILS	LINE	ITEM CODE	DESCRIPTION	QTY	AMOUNT	DISCOUNT	NOT TAXED	TAXABLE	TAXES/FEES	TOTAL		
<input checked="" type="checkbox"/>	1.00	DXLAVT-1	DXL AVT TEST PRODUCT 1	1	100.00	0.00	0.00	100.00	6.00	106.00		
<input checked="" type="checkbox"/>	2.00	DXLAVT-1	DXL AVT TEST PRODUCT 1	1	99.00	0.00	0.00	99.00	5.94	104.94		
<input checked="" type="checkbox"/>	3.00	DXLAVT-1	DXL AVT TEST PRODUCT 1	1	98.00	0.00	0.00	98.00	5.88	103.88		

The committed Frontier invoice is now available for reporting and returns filing.

- Use during implementation
- Allows a detailed report of sales tax execution, executes tax calculation just like system would
- Better oriented to Frontier *versus* the test tool in the RV2 SDK.
- Command is **OTXTST**:
 - Use OPT(*PRINT)

```
OTXCALC Test Harness (OTXTST)

Type choices, press Enter.

Sales order number . . . . . > 55573471      Number
Sales order suffix . . . . . 0              Number
Commit transaction . . . . . '0'          Logical value
Option flags . . . . . > *PRINT            *SHPQ, *PRINT
      + for more values
Tax Application name . . . . . *DEFAULT    Name, *DEFAULT
```


TEST HARNESS GENERATES A SPOOLED REPORT...

```

Display Spooled File
File . . . . . OTXCALC                               Page/Line 1/1
Control . . . . .                               Columns 1 - 130
Find . . . . .
*...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0...+...1...+...2...+...3
OTXCALC  RADDTACUR2 OTXCALC Detail Report 12/05/2019 15:56:25 Page: 1
-----
OTXCALC REQUEST (OTXCALC_Rqs_t)
Order and suffix . . . . . : 55573471 00
Commit indicator . . . . . : 0
Invoice and invoice date . . . : 0001-01-01
Option flags (int(10)) . . . . : 1073741824
User and program . . . . . : RADCUR2 OTXTST
TAX APPLICATION HEADER (OTXPLUG_Hdr_t)
Request ID (int(20)) . . . . . : 9833
Frontier div, co, chart, TAXVS: 01 01 BASE1 s
Sold-to, ship-to . . . . . : CADE CADE
Ship-to PO, sold-to PO . . . . : *...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0...+...1...+...2...
Order, suffix, order type . . . : TAX APPLICATION DETAIL (OTXPLUG_Dtl_t)
Commit ind, invoice, inv date :
MLC ind, currency, rate . . . . : Index Item ProdTaxCode Md Product Xchg Quantity ExtendedAmt TAX PST VatC
Shipping warehouse . . . . . : 1 -.04 FR030000 0 HANDLE 1 15.00 0 0 HANDLING CHARGES
Tax state, group . . . . . : 2 1.00 PF050083 1 ZIN12 10 799.90 0 0 Y ZINFIDENAL #12
Entity use code, exempt flags :
F3=Exit F12=Cancel F19=Left F2

```

```

TAX APPLICATION RESULTS (RC & OTXPLUG_Rslt_t)
Return code, VALID ind. . . . . : 0 1
Total tax due . . . . . : 1.17
Amount taxable . . . . . : 15.00 total, .00 merchandise
Amount non-taxable . . . . . : 799.90 total, 799.90 merchandise
COMMITTED indicator . . . . . : 0

RETURN VALUES
Item St TaxID Alpha VatC Taxable Rate TaxAmount Incl TaxDesc/JurDesc/JurCode
OTXCALC RADDTACUR2 OTXCALC Detail Report 12/05/2019 15:56:25 Page: 2
-----
RETURN VALUES
Item St TaxID Alpha VatC Taxable Rate TaxAmount Incl TaxDesc/JurDesc/JurCode
>>> Message: NOTE Entity use code defaulted to ""
>>> Message: NOTE tax request ID is 9833
>>> Message: [OTXAVT] Using cached results from RQSID(9831)

```

FUTURE ROADMAP

What's on the radar for Sales Tax and Avalara

- Frontier 4.1 introduced **address validation** using a USPS web service
 - Customer master records, and sales orders
- We can extend this to use Avalara address validation as well
 - Address validation is included with your AvaTax subscription
 - Uses the same infrastructure as AvaTax
 - Must set up a **resolve** control record in the RV2 SDK for each division

- Show tax breakdown in UI order totals and elsewhere
 - Rather than just a total “tax” line
 - UI Inquiries, UI order totals, acknowledgements, ASNs
 - Invoices are already OK
- We already harvest the data as of EC 52679
 - For both *BASE and AVALARA plugins

ORD#	SUF X	INV#	INVDTE	SEQ	JST	TID	ACAK	BASETX	BASENT	BASEEX	RATE	TAX	JCODE	JDESC
5557347 1	0		0001-01-01	1	CA	06	TAX	15.00	799.90	0.00	0.06000	0.90	06	CALIFORNIA
5557347 1	0		0001-01-01	2	CA	055	TAX	15.00	799.90	0.00	0.00250	0.04	055	NAPA
5557347 1	0		0001-01-01	3	CA	EMTLO	TAX	15.00	799.90	0.00	0.01000	0.15	EMTLO	NAPA CO LOCAL TAX SL
5557347 1	0		0001-01-01	4	CA	EMAX0	TAX	15.00	799.90	0.00	0.00500	0.08	EMAX0	NAPA COUNTY DISTRICT TAX SP

- The revised tax infrastructure introduced by EC 52679 hasn't been validate or tested for VAT yet.
- We need to clean this up and test.
- At the same time, we will aim for Avalara "VAT" certification.

Q & A