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Important Information: Read before proceeding

The Indiana Department of Revenue (DOR) has created this SFTP Bulk Upload guide for business customers that need to submit a file size that exceeds 10 MB. Registering for SFTP can only take place if a file has been rejected by INTIME for exceeding the 10 MB size restriction.

If a file size is under 10 MB, manually enter or upload via INTIME.

When filing securely via INTIME, bulk files do **not require** a file naming convention **or** encryption.

If a file size exceeds 10 MB, continue to use this guide to register for SFTP. When bulk filing via SFTP, it is required to follow the file naming convention and file(s) must be encrypted.

Overview of Bulk Upload

Taxpayers who need to submit files that exceed 10 MB can electronically bulk upload these records to the Indiana Department of Revenue (DOR) via Secure File Transfer Protocol (SFTP) for all file types. Bulk upload files are created by the customer and then submitted to DOR for processing. The files are processed sequentially within a couple of hours. During high-volume processing, there can be an increased turnaround time for <u>acknowledgments</u>. When the process is complete, an acknowledgment email is sent to the authorized representative with the results of the submission.

INTIME (Indiana Tax Information Management Engine), DOR's e-services portal, provides an expanded file and is the preferred method for file submissions exceeding 10 MB. File submissions will not be viewable in a customer's INTIME account for at least one full business day.

Additional information and resources for bulk filing Indiana taxes are available.

See Appendix H for more information on tax type and bulk filing methods and options.

Important

SFTP Registration is only required for file sizes that exceed 10 MB.

Use INTIME to submit files under 10 MB. An INTIME Guide to Filing Withholding Taxes is available.

Taxpayer Registration

Before filing bulk returns, all submitters or customers with files being submitted on their behalf, must be registered with the state of Indiana, and have a valid 10-digit TID number with a three-digit location. If you need to obtain your Indiana Taxpayer Identification Number (TID), you can register at <u>inbiz.in.gov/taxes-fees/tax-registration</u>.

SFTP Registration Steps

Only customers with files that exceed 10 MB in size can register to use SFTP with the following steps:

Step 1: <u>All customers must be registered on INBIZ</u> to receive their 10-digit TID.

Note: A three-digit location number will be provided in a letter from DOR, and then viewable as part of the TID once a customer is logged in to INTIME.

Step 2: All submitters must register or already have an INTIME logon to access SFTP registration.

Note: A vendor code is not required when uploading XML files via INTIME; Leave "Vendor Code" field blank (example: <VendorCode></VendorCode>) or enter all ones (example: <VendorCode>11111</VendorCode>.

Step 3: Before a customer can register for SFTP, a file must first be submitted via INTIME direct upload and be rejected for exceeding the 10 MB size limit. Files must be 10 MB or more to use SFTP for bulk filing.



Step 4: To begin the SFTP registration process, <u>log in to INTIME</u>, go to "All Actions" tab, locate the "SFTP Filer registration" panel, then select "New SFTP registration".



Step 5: Enter 10-digit TID and click "Next." Using anything other than your TID will result in the registration being rejected during processing.

Tip: TID is displayed in the top-left corner of the screen under the business name when logged in to INTIME.

Step 6: Enter all required SFTP filer information then click "Next."

Note: In the "Acknowledgment Receipt" dropdown, you can select the option to have a detailed XML attachment sent to your SFTP "OUT" folder in addition to receiving an emailed version.

Step 7: You must check the box to confirm that the information provided is accurate. If the box is not checked, the SFTP Registration request cannot be submitted.

Overview	Authenticate Vendor	Vendor Registration Information	Summary	
You will be registered to a second	to file through SFTP once this reques	t has been processed.		Þ
 Notice to Withholding If you are the responsi 	Service Providers, PEO and CPEO: ble party listed as a Withholding SFTI	P service provider, including Profess	ional Employer Organization (PEC)) or Certified Profession
Employer Organization following statement (Ir "A payroll service provi	(CPEO) filers, and are continuing to idiana Code 6-8.1-18-1): ider must certify and acknowledge th	submit this registration for SFTP to hat the bank account that is used by	DOR, you are also acknowledging the payroll service provider for e	and agreeing to the
deposits shall only be i holding and is required used for any other pur a navroll service provid	used for employer withholding tax lia d to remit to the appropriate agency, pose (other than using the account a fer's withdrawal or use of funds in th	abilities and other payroll obligation employee of the employer, or othe as a sweep account), including for the executed for any unathorized our	s of client employers that the pay r payee as authorized by the emp e payment of operating expenses ose constitutes fraud."	roll service provider is loyer, and may not be or personal use, and th

- Step 8: A confirmation will be provided on screen. Save this confirmation for your records. A printable view option is available and allows the customer to print or save a copy.
- Step 9: Once registration has been completed, DOR will send an email to confirm that you are now registered to upload bulk files via SFTP, along with a unique case-sensitive SFTP username, vendor code, tax codes, and the FTP site name.
- Step 10: Create SSH private and public keys (<u>See Appendix A for instructions</u>), then provide DOR with the public key via email to <u>bulkfiler@dor.in.gov</u>. You will not be able to log in to <u>gasecuremft.in.gov</u> until your public key is received by DOR. It may take one to two business days to receive confirmation from DOR that your SSH public key has been received and stored.
- Step 11: <u>Download and install the client SFTP software</u> (GUI (WinSCP Install). Instructions available in <u>Appendix B</u>.
- Step 12: Files must follow the naming convention when submitting to the SFTP site. The <u>file naming</u> <u>convention is available in this guide</u>. Your file will be rejected if the naming convention is not followed. An email will be sent to you from <u>Bulkfiler@dor.in.gov</u> with information regarding the rejected file name error.

- Step 13: Download and install PGP or GPG software. Instructions for PGP are available in <u>Appendix D</u> or <u>Appendix E</u> for GPG. Files must be properly encrypted for SFTP submission. If your file is not encrypted properly, it will be rejected. <u>Encryption process information is available in this</u> <u>quide</u>.
- Step 14: File specifications and schemas are available on <u>DOR's Resources for Bulk Filing your Indiana</u> <u>Taxes</u> page.
- Step 15: Drop file(s) onto FTP server, then go to the location where you created your secure PGP/GPG file. Click and drag that file from the left pane and drop it into the IN folder in the right pane. Repeat as needed. When you are done, click the "X" in the upper-right corner to close this screen.

Existing SFTP Registration Steps

A customer will need to follow existing SFTP registration steps if they need to update or add additional contacts, email, phone number(s), and/or additional tax type(s) if appropriate.

Step 1: To begin the existing SFTP registration process, log in to INTIME, go to "All Actions" tab, then the "SFTP Filer registration" panel to select "Existing SFTP registration" link.



- Step 2: Enter your valid SFTP vendor code.
- Step 3: Enter new information in the fields under the "New vendor contact information (enter only if different from existing)" section. This is where contacts, email address(es), phone number(s) can be updated or added. Additional tax type(s) can be added in the bottom section, if needed.

or or Ently name		New vendor contact information (enter only if different from existing) Vendor or Entry name		
		t Phone		
Extension			Phone Extension	
tter Type			Submitter Type	
622			Automatical advances Breaklan	
vledgement Receipt I recipient with detail Note: Please make any Email(s) on file	ed XML attachment additions, deletions, or upd	lates to emails listed in the tabl	e below. All email addresses listed below t	will be stored on file with your vendor code.
viedgement Receipt recipient with detail Note: Please make any Email(s) on file	ed XML attachment additions, deletions, or upd	lates to emails listed in the table	e below. All email addresses listed below to be below the below will be stored on file with your	will be stored on file with your vendor code.
Wedgement Receipt I recipient with detail Note: Please make any Email(s) on file four must have at least ct SFTP tax type w Type	ed XML attachment additions, deletions, or upd one tax type, form type com (\$)/form type(\$) Form Type	lates to emails listed in the table nbination below, All methods lis Description	e below. All email addresses listed below to below will be stored on file with your	will be stored on file with your vendor code. vendor code.
viedgement: Receipt recipient with detail Note: Please make any Emailtyi on file four must have at least ct SFTP tax type Rithholding	ed XML attachment additions, deletions, or upd one tax type, form type com (s)/form type(s) Form Type WH-1	ates to emails listed in the table nbination below. All methods lis Description Form WH-1 (Code 005)	e below. All email addresses listed below to be below the below will be stored on file with your	will be stored on file with your vendor code. vendor code. File type XML
Vedgement Receipt I recipient with detail Note: Please make any Email(s) on file four must have at least ct SFTP tax type Netholding Netholding	ed XML attachment additions, deletions, or upd one tax type, form type com t(s)/form type(s) Form Type WH-1 EFW2 Format	Inters to emails listed in the table Inbination below. All methods lis Description Form WH-1 (Code 005) EFW2 format (Code 201): V	-conserverse receipt below. All email addresses listed below to below will be stored on file with your ted below will be stored on file with your	Vendor code.
Vedgement Receipt I recipient with detail Note: Please make any Email(s) on file four must have at least ct SFTP tax type withholding /ithholding	ed XML attachment additions, deletions, or upd additions, deletions, or upd one tax type, form type com t(s)/form type(s) Form Type WH-1 EFW2 Format WH-3	Inters to emails listed in the table Inbination below, All methods list Description Form WH-1 (Code 005) EFW2 format (Code 201); V Form WH-3 (Code 201)	e below. All email addresses listed below to below will be stored on file with your	vendor code. File type XML TEXT XML

Step 4: You must check the box to confirm that the information provided is accurate before submitting. If the box is not checked, the SFTP Registration request cannot be submitted. A confirmation number will be displayed once submitted.

Overview	Authenticate Vendor	Vendor Registration	Summary
 You will be registered t 	o file through SFTP once this reques	t has been processed.	
onfirm that the inform	ation provided is accurate.		4
Notice to Withholding 5	Service Providers, PEO and CPEO:		
If you are the responsit Employer Organization following statement (In	ble party listed as a Withholding SFT (CPEO) filers, and are continuing to diana Code 6-8.1-18-1):	P service provider, including Profess submit this registration for SFTP to	ional Employer Organization (PEO) or Certified Professi DOR, you are also acknowledging and agreeing to the
"A payroll service provi deposits shall only be u holding and is required used for any other pur a payroll service provid	der must certify and acknowledge th ised for employer withholding tax lis to remit to the appropriate agency, pose (other than using the account a er's withdrawal or use of funds in th	nat the bank account that is used by abilities and other payroll obligation employee of the employer, or othe is a sweep account), including for the e account for any unathorized purp	the payroll service provider for employer withholding to of client employers that the payroll service provider is r payee as authorized by the employer, and may not be e payment of operating expenses or personal use, and ose constitutes fraud.*

Testing your File for Submission

Test files will only be accepted in special circumstances as deemed necessary. Testing is a manual process, and you must contact us via <u>Bulkfiler@dor.in.gov</u> if you are required to submit a test file for processing and feedback. SFTP supported tax types will be processed as a production file **unless** you change the file type to a "T" instead of a "P". To submit a test file, you must notify <u>DOR's Electronic Services team</u>.

File Validation

XML files have two levels of validation:

- 1. Schema validations
- 2. Business rule validations.

Flat files have field value validations (e.g., line lengths, required records).

If either file type fails format validations, no business rule validation will occur because DOR will be unable to read the file.

Acknowledgments

When uploading an encrypted file to the SFTP site, you will receive an acknowledgment email to notify you that your file has been processed. You can also elect to have detailed XML sent to your SFTP "OUT" folder.

The email will indicate the status of the file with one of the following messages:

Accepted: The absence of any error messages or codes indicates that the return processed successfully. The base filename will be the same as that of the file submitted.

Partially Accepted: DOR's system processes accepted returns within the file and rejects the incorrect returns. The XML attachment will provide details of which returns have been accepted, and which have been rejected along with the reason for the rejection. This allows you to correct the rejected returns within that file and resubmit only those that had been rejected.

Rejected: If any of the records submitted in flat file format have invalid or incorrectly formatted data, the entire file is rejected. The error message lists the returns that require correction.

Example of a successfully processed file email message

The Indiana Department of Revenue (DOR) received a bulk file named [*FileName*] from you or on your behalf. The file was fully processed without errors. An XML formatted file detailing the processing results is attached to this email for your records.

Note: If you do not receive an acknowledgment file, you should **not** assume your file has been received and or accepted. Do not resubmit a file until you receive a message indicating that it has not been received.

If you do not receive an acknowledgment within two hours:

- Verify that the file was named correctly, which includes your accurate Vendor Code as shown in your Certificate of Registration along with the other name parts.
- Verify that file was encrypted using only DOR's public key.
- Reach out to the Electronic Services team at <u>Bulkfiler@dor.in.gov</u>

If these are correct, email DOR at <u>BulkFiler@dor.IN.gov</u> to verify reception.

This is an example of a return with no errors and indicates the return processed.



Example of rejected file email message

The Indiana Department of Revenue (DOR) received a bulk file named *[FileName]* from you or on your behalf. The file has been rejected for validation errors. An XML formatted file detailing the errors is attached to this email. Please resubmit a corrected file.

The following example shows a return that was rejected due to an invalid TID and location in the EIN element. When a return is submitted through the bulk upload process, the Indiana ID and location are verified against our main database. If this TID and location do not match any active accounts in our database, the return is rejected. This return should be corrected and resubmitted.



Example of partially accepted file email message

If there are multiple returns in an XML format file, each return can be accepted or rejected independently of each other. The partially accepted file email message will include an XML attachment that will provide details of which returns have been accepted and which have been rejected along with the reason for the rejection. Once the returns have been corrected, do not resubmit the returns that were originally submitted successfully, only those that were rejected.

File Naming Conventions

Note: File names must be 21 characters in length, not including the file extensions. Incorrectly named files will not be processed or acknowledged.

Position	Numbers of Characters	Values
1	1	File Type Indicator Valid Indicators: P = Production T = Test
2-11	10	Submitter Identifier as assigned through DOR's registration process. Left Zero padding is required.
12-14	3	Tax Form Code 005 = Form WH-1 201 = WH-3 (XML files) and EFW2 Specification (flat files) 202 = 1220 format (include W2Gs and 1099Rs) 027 = MVR-103 <u>See Appendix F for more options</u> .
15	1	File format code that is used to represent the data in the file. This is the file format that was certified. 1 = XML 2 = ASCII or .txt
16-21	6	Sequence Number incremented from 000001 for each transmission of the specified Tax Form Code made by the Submitter in a given tax year.
22-25	4	Extension depending on the file format. File format Extensions: .xml .txt
26-29	4	File Extension after encryption: .pgp .gpg

Note: Duplicate file names in a calendar year will be rejected.

Examples: File name of production file (P), submitter identifier 12345678, tax type WH-1 (005), file type - xml (1), sequence 7,

- Before Encryption: P00123456780051000007.xml
- After Encryption: P00123456780051000007.xml.gpg

PGP or GPG Software

Note: Use either PGP or GPG, but not both. Using both will encrypt a file twice and cause it to be rejected.

To set up PGP software, see Appendix D.

To set up GPG software, see Appendix E.

Encryption for SFTP Submission

All files **must** be encrypted using PGP or GPG (kleopatra) when sent to our secure SFTP site.

Tip: This type of activity might be the responsibility of your IT department.

To encrypt your file with <u>PGP</u> or <u>GPG</u>

- Step 1. Create your own public/private key pair using PGP/GPG.
- Step 2. Download and install <u>DOR's public key</u> for file encryption. If your file is not encrypted properly, it be rejected.
- Step 3. Import the DOR's public key into your encryption software for your use.
- Step 4. Encrypt the data using only DOR's public key.
- Step 5. Upload the data to the secure SFTP site.

PGP/GPG encryption works between two parties, each of which has a pair of encryption keys: one of which is public, the other private. The data to be encrypted is encoded using the recipient's public key. The recipient checks the validity of the sender data by checking the encryption against the recipient's private key. If that step passes, the data can be decrypted using the recipient's private key. In this way, the public key can be made public and there is no need for the private key to be sent to the submitter, thus improving security.

Kleopatra Usage

Step 1: To encrypt a file using GPG and Kleopatra for submission to Indiana via SFTP Bulk File, launch Kleopatra. The Kleopatra startup screen should display your key and our public key (Indiana Department of Revenue ERF) that has been imported. Select "Sign/Encrypt" in the upper-left menu.

🙃 Kleopatra	6											×
File View	Certificates Tools	Settings	Window	Help								
Sign/Encrypt.	Decrypt/Verify	EĘ Import	ES Export	EF Certify	Q Lookup on Server	EF Certificates	E Notepad	E Smartcards				
Search	it+Q>										Al Certificates	~
Firstna	Name ame Lastname a Department of Re	venue ERJ	you RAt	remail@d kison@de	E-Mail Iomain sr.in.gov		User-IDs certified certified	Valid From 08/02/2023 10/24/2008	Valid Until	Key-ID 3279 C980 83E3 EE7F 7A32 1AC0 DC88 DED2		٦



- Step 3: When first opened, the "Sign/Encrypt" screen will have all the boxes checked as a default. Deselect "Sign as:" and "Encrypt for me:" so that only "Encrypt for others" is left checked, then click in the "Encrypt for others" field where it says, "Please enter a name or email address...", select the "Indiana Department of Revenue ERF" (associated with RAtkinson email), and then select that key. (See image below.)
- Step 4: Note the filename and extension in the bottom text box that is showing the encrypted file that will be produced. Select the "Encrypt" button.

👦 Sign/Encrypt Files - Kleopatra	?	×
Sign / Encrypt Files Prove authenticity (sign) Sign as: Indiana Department of Revenue ERF <ratkison@dor.in.gov> (certified, created)</ratkison@dor.in.gov>	ed: 10/24/20	008] ~
Encrypt Indiana Department of Revenue ERF <ratkison@dor.in.gov> (certified, created)</ratkison@dor.in.gov>	ed: 10/24/20	008] ~
Encrypt for others: Indiana Department of Revenue ERF <ratkison@dor.in.gov> (certified, Oper</ratkison@dor.in.gov>	nPGP, a 🕙	24
Encrypt with password. Anyone you share the password with can read the data.		
Output		
Output files/folder: C:/Users/sroe/Downloads/P00012345670051123456.xml.gpg Encrypt / Sign each file separately.	Ø	ß
Encrypt	Can	cel

Step 5: Once the "Results"/"Encryption succeeded" screen is displayed, click on "Finish".

SFTP Bulk Filing Annual Renewal

With the passing of Bill 234 (effective January 2022), there is a new SFTP bulk filing annual renewal process for payroll service providers who file Withholding, **including Professional Employer Organizations (PEO)**, and **Certified Professional Employer Organizations (CPEO)**. All active SFTP accounts must renew their accounts annually prior to December 31.

Indiana Code 6-8.1-18-1

"A payroll service provider must certify and acknowledge that the bank account that is used by the payroll service provider for employer withholding tax deposits shall only be used for employer withholding tax liabilities and other payroll obligations of client employers that the payroll service provider is holding and is required to remit to the appropriate agency, employee of the employer, or other payee as authorized by the employer, and may not be used for any other purpose (other than using the account as a sweep account), including for the payment of operating expenses or personal use, and that a payroll service provider's withdrawal or use of funds in the account for any unauthorized purpose constitutes fraud."

- Step 1. Go to INTIME (non-logged in screen)
- Step 2. Locate "Renew SFTP Registration" panel and click on, "Annual renewal for SFTP registration."
- Step 3. Enter vendor code and name of previously submitted Withholding filename.
- Step 4. Read and agree to "Notice to service providers"

Tip: Be sure to check the agreement notice box or you will receive an error message before you can move on to the next screen.

			0
Information	Authenticate	Renewal	Summary
Vithholding SFTP Re	newal Form		
endor Code			
6000			
Notice to Withholdin	g Service Providers, PE	O and CPEO	
is part of the registration or re Professional Employer Organiz 8-11:	newal process and before continu ation (PEO) or Certified Profession	ing to submit via SFTP to DOR, th al Employer Organization (CPEO)	e responsible party listed as a Withholding SFTP service provider, including filers, must acknowledge and agree to the following statement (Indiana Code 6
appropriate agency, employer withhol appropriate agency, employer withhol sweep account), including	must certify and acknowledge that ding tax liabilities and other payrol oyee of the employer, or other payr for the payment of operating expe	the bank account that is used by I obligations of client employers se as authorized by the employer rises or personal use, and that a	the payroll service provider for employer withholding tax deposits shall only be that the payroll service provider is holding and is required to remit to the , and may not be used for any other purpose (other than using the account as payroll service provider's withdrawal or use of funds in the account for any

ACH Debit Payments: Debit Block Option

Customers who use an Automated Clearing House (ACH) debit to make tax payments to DOR will be required to provide their business' bank with the following **Debit Block: 9207000TAX**.

A Debit Block protects your business's bank account from unauthorized electronic charges. This additional safeguard is completely optional and is used by some customers that elect to allow only ACH debits with a matching Debit Block number to draft payments from their bank account. <u>See more information</u>.

If a payroll service provider submits an ACH payment with your business' bank account number and you have an existing debit block on the account, then you DO need to ADD the debit block number with your bank. If the payroll service provider is submitting a payment with their bank account number, then you do NOT need to update the debit block. In this scenario, the service provider will need to update their own debit block number.

Add or Update SSH Keys for SFTP Account

For new or existing SFTP account: For updated SSH keys or multiple keys for additional users, provide DOR with an updated public key via email to <u>bulkfiler@dor.in.gov</u>. You will not be able to log in until your updated public key is received by DOR.

Contact Us

Electronic Services Team Indiana Department of Revenue 100 North Senate Avenue, IGC N286 Indianapolis, IN 46204-2253 Bulkfiler@dor.IN.gov

APPENDIX A: Generating SSH Keys

Once a new SFTP registration is accepted and processed, follow these instructions to generate SSH (Secure Socket Shell) private and public keys:

- Step 1: Go to dor.in.gov/iot/customer-service/myshareingov/secure-file-transfer-sftp/.
- Step 2: Select "Key Generator (to be used for batch scripting)" to download (puttygen.exe) and install the "Putty Key Generator" on your desktop.
- Step 3: Open "Putty Key Generator".
- Step 4: Select the "SSH-2 RSA" option and change the "Number of bits in a generated key" field to 2048.
- Step 5: Select "Generate," then move your mouse arrow over the blank "key" area to help generate a random key combination.



- Step 6: Once the key is generated, it will populate in that space. (See next image.)
- Step 7: Format "Key comment" to include your vendor name. Place an underscore (_) in front of your vendor username.

Note: Vendor name is provided in the email you received from DOR regarding registration.

🚰 PuTTY Key Generato			>
File Key Conversior	ns Help		
Key Public key for pasting ir ssh rsa AAAAB3NzaC +t9Jn 1VdxHhEDXDZJ WFjT3b 7sXEhY6qMki uSEwb1Bg8Q499hAG TNHwkWRaG3Rr/zp1	to OpenSSH authorized lyc2EAAAABJQAAAQE W4t2/RahwHRcJDZoa XFS8ba57ViejwLADPg(EVN/T1x3Lmz51tuFV0 WSYwtaJ3pcJEycPQ9q	1_keys file: A555tyG 7s 2vRS9tk NcDoJBg5SF 3pmOpjg2Ntzsg5qsXvi XyvJn T61(0xN6f3RPyS 18uQe3NOvidakqLb3o;	283E0LWjCvmCA iDVOfZD84+4ZN CKMyi/toiGAqixJK gKcdJKNQfaLtsA ✓
Key fingerprint:	ssh-rsa 2048 7b:c4:4f:6	60:d8.fc:a1:79:16:05:7	7:a8:29:df:a7:22
Key comment:	rsa-key-2024010 <mark>8_</mark> Ver	ndorUsemame	
Key passphrase:			
Confirm passphrase:			
Actions	L		
Generate a public/priva	ate key pair		Generate
Load an existing private	e key file		Load
Save the generated ke	у	Save public key	Save private key
Parameters			
Type of key to generate SSH-1 (RSA)	e:	⊖ss⊦	I-2 DSA
Number of bits in a gen	erated key:		2048

Note: When generating SSH keys (private and public), this step is only done once.

Private Key

Step 8: Click "Save private key."

🚰 PuTTY Key Generato	r		×
File Key Conversion	ns Help		
Key			
Public key for pasting in	nto OpenSSH authorized	l_keys file:	
ssh-rsa AAAAB3NzaC +t9.ln1VdxHbEDXDZ	1yc2EAAAABJQAAAQE/ IW4t2/RabwHRc.IDZoa	A555tyG7s 2vRS9rkNcDoJBa55	P83E0LWiCymCA
WFjT3b7sXEhY6qMki	XFS8ba5YViejwLADPgG	PmOpjgzNxzsg5qsX	viiDVOfZD84+4ZN
TNHwkWRaG3Rr/zp	WSYwtaJ3pcJEycPQ9ql	8uQe3NOvidakqLb3	ogKcdJKNQfaLtsA V
Key fingerprint:	ssh-rsa 2048 7b:c4:4f:6	0:d8.fc:a1:79:16:05:	77:a8:29:df:a7:22
Key comment:	rsa-key-20240108_Ven	dorUsemame	
Key passphrase:			
Confirm passphrase:			
Antinan			
Actions			
Generate a public/pnv	ate key pair		Generate
Load an existing private	e key file		Load
Save the generated ke	y [Save public key	Save private key
Parameters			
Type of key to generat SSH-1 (RSA)	e:	⊖ ss	SH-2 DSA
Number of bits in a gen	erated key:		2048

Step 9: When the "PuTTYgen Warning" pops up, select "Yes."

e Key Conversior	ns Help	
ney Public key for pasting in	nto OpenSSH authorized kevs file:	
ssh-rsa AAAAB3NzaC +9Jn 1VdxHhEDXDZJ WFjT3b7sXEhY6qMki uSEwbLBg8Q499hAG TNHwkWRaG3Rr/zpV	1yc2EAAAABJQAAAQEA555tyG7s W42/RahwHRcJDZoa2vRS9kNo XFS8ba5YViejwLADPgGPmOpjg2N EVN/T1x3Lmz51tuFVOXyvJnT6iQ WSYwtaJ3pcJEycPQ9ql8uQe3NOv	cDoJBg5SP83E0LWjCvmCA kzsg5qsXviiDVOfZD84+4ZN kxN6f3RPy9CxMvj/toiGAqjxJK vidakqLb3ogKcdJKNQfaLtsA
Key fingerprint: PuTT	Ygen Warning	☆ df:a7:22
Key passphrase:	Are you sure you want to s	save this key
Confirm passphra	. without a passpinase to p	
Confirm passphra	Yes	No ienerate
Confirm passphre Actions Generate a publi Load an existing private	Yes Yes	No jenerate
Confirm passphr Actions Generate a publi Load an existing private Save the generated ke	Ves Ves a key file ny Save put	No jenerate Load blic key Save private key
Confirm passphra Actions Generate a publi Load an existing private Save the generated ke Parameters	e key file ry Save put	No ienerate Load blic key Save private key
Confirm passphr Actions Generate a publi Load an existing private Save the generated ke Parameters Type of key to generate O SSH-1 (RSA)	Ves Ves v Save put e: • SSH-2 RSA	No jenerate Load blic key Save private key

Step 10: Name the private key filename with **vendorusername_year_privatekey** (i.e., 1-DOR-vendorname_2024_privatekey) and save it on your desktop.

Public Key

Step 11: Select "Save public key."

😴 PuTTY Key Generato	r		×
File Key Conversion	ıs Help		
Key			
Public key for pasting in	nto OpenSSH authorized_key	s file:	
ssh-rsa AAAAB3NzaC	yc2EAAAABJQAAAQEA555t	yG7s	
WFjT3b7sXEhY6qMki	XFS8ba5YViejwLADPgGPmC	pjgzNxzsg5qsXvii[DVOfZD84+4ZN
uSEwbLBg8Q499hAG TNHwkWRaG3Rr/zp	EVN/T1x3Lmz51tuFVOXyvJr NSYwtaJ3pcJEvcPQ9gl8uQe	1T6ilQxN6f3RPy9C 3NOvidakoLb3ool	xMvj/toiGAqjxJK KcdJKNQfaLtsA ∨
Key fingemrint:	ssh-rsa 2048 7b c4 4f 60 d8	fc:a1:79:16:05:77:	a8:29:df:a7:22
	aan 1au 20040100 Maadadu		00.20101107122
Key comment:	rsa-key-20240108_vendor0	semame	
Key passphrase:			
Confirm passphrase:			
Actions			
Generate a public/priva	ate kev pair		Generate
Load an existing private	; key file		Load
Save the generated ke	y Sa	ve public key	Save private key
Parameters			
Type of key to generate SSH-1 (RSA)	e:	⊖ ssh-	2 DSA
Number of bits in a gen	erated key:		2048

- Step 12: Name the public key filename with **vendorusername_year_publickey** (i.e., 1-DOR-vendorname_2024_publickey) and save it on your desktop.
- Step 13: Close PuTTy window.

IMPORTANT

SFTP bulk filers must provide their SSH public key to DOR at <u>bulkfiler@dor.in.gov</u> before production files can be submitted. It may take one to two business days to receive confirmation from DOR that the public key has been received and stored.

Upon receiving confirmation, proceed with the steps in Appendix B.

APPENDIX B: WinSCP Installation and Setup Instructions

The following instructions will guide you through the process on how to install and set up the software to send DOR your files.

- Step 1. <u>Go to the SFTP website.</u>
- Step 2. Select GUI and download WinSCP.
- Step 3. After installing, run WinSCP by double-clicking the desktop icon.

APPENDIX C: Logging Into WinSCP

These instructions provide guidance on how to log into WinSCP, store your private key, and transmit files to DOR.

- Step 1: Select "new site" tab.
- Step 2: Enter Host name as: gasecuremft.in.gov
- Step 3: Locate vendor username in SFTP registration email received from DOR.
- Step 4: Click "Advanced" to proceed to next step.

Host name:		Po	ort number:
gasecuremft.in.gov			22 🛓
User name:	Pas	sword:	
Save		Ad	vanced 🖣

Step 5: Select "Authentication" and then click the three dots to choose private key. (Note that file extension .ppk indicates private key.) Once private key is selected, click "Open," and select "Ok."

Bypass authentication entirely			
Authentication options			
Attempt authentication using Page	eant		
Attempt 'keyboard-interactive' au	thentication		
Respond with a password to t	the first prompt		
Authentication parameters			
Allow agent forwarding			
Private key file:			
::\Users\sroe\Downloads\1-DOR-bu	lkfiler_2024_PrivateKey.ppl	k	
Display Public Key	Tools 💌		4
Certificate to use with the private key	y:		L.
GSSAPI			
Attempt GSSAPI authentication			
Allow GSSAPI credential deleg	ation		
	Attempt authentication using Page Attempt 'keyboard-interactive' au Respond with a password to t Authentication parameters Allow agent forwarding Private key file: ::!Users\sroe\Downloads\1-DOR-bu Display Public Key Certificate to use with the private key GSSAPI GSSAPI Attempt GSSAPI authentication Allow GSSAPI credential deleg	Attempt authentication using Pageant Attempt "keyboard-interactive" authentication Respond with a password to the first prompt Authentication parameters Allow agent forwarding Private key file: E:\Users\sroe\Downloads\1-DOR-bulkfiler_2024_PrivateKey.pp Display Public Key Tools Certificate to use with the private key: GSSAPI Attempt GSSAPI authentication Allow GSSAPI credential delegation	Attempt authentication using Pageant Attempt 'keyboard-interactive' authentication Respond with a password to the first prompt Authentication parameters Allow agent forwarding Private key file: ::'Users'sroe'pownloads\1-DOR-bulkfiler_2024_PrivateKey.ppk Display Public Key Tools Certificate to use with the private key: GSSAPI Attempt GSSAPI authentication Allow GSSAPI credential delegation

Step 6: Select "Save."

Step 7: When the "Save session as site" pop-up window appears, select "Ok."

Save session as site	?	\times
Site name:		
1-DOR-bulkfiler@gasecuremft.in.gov		
Folder:		
<none></none>		~
Save password (not recommended)		
Create desktop shortcut		
OK Cancel	He	elp

Step 8: Log in to SFTP and select "Continue."

SFTP	\sim	
Host name:		Port number:
gasecuremft.in.gov		22 🚔
User name:	Password:	
1-DOR-bulkfiler		
Save		Advanced

Note: Cache key only populates on the first login (see image below). Select "Yes"



Step 9: The program window will display and split the local directory and the remote directory as two side-by-side panes.



Note: Proceed with <u>SFTP Registration steps 12 to 15</u> for direction on file naming conventions and encrypting a file before proceeding.

- Step 10: Using the left pane, go to the location where you created your secure PGP/GPG file. Click and drag that file from the left pane and drop it into the IN folder in the right pane. Repeat as needed. When you are done, click the "X" in the upper-right corner to close this screen.
- Step 11: An acknowledgment email will be sent to notify you that your file has been accepted, rejected, or partially accepted. A detailed XML attachment will be placed in your "OUT" folder only if that option was selected during registration.

Note: If you do not receive an acknowledgment email within one to two business days, it is likely that the file was not named correctly. Files not adhering to the naming convention will NOT be acknowledged or processed. If you do NOT receive an acknowledgment email, contact DOR at <u>bulkfiler@dor.in.gov</u> before resending any files.

APPENDIX D: PGP Setup and Use

PGP (pretty good privacy) is a software package used for encryption of files and emails. PGP, owned by Symantec, is available for a license fee and may be downloaded and purchased at https://www.symantec.com/products/information-protection/encryption/command-line.

All of the commands in this document were executed in a Command (DOS) window. These commands can also be executed in a Powershell Window. All commands are shown in Courier New font. Answers to prompts are highlighted in bold red as shown in the example below:

The use of encryption requires a key. Keys are composed of a private and a public part. When encrypting a file for submission to DOR, a public key is used; when decrypting, the private key is used. Commands for generating a key are provided below.

Conventions used in this tutorial:

- Commands are shown in Courier New type in black.
- Answers to prompts are shown in bold red type.
- Substitutions are shown in bold blue type.

Install PGP

Purchase, download, and follow the installation instructions from Broadcom.

Note: Use either PGP or GPG, but not both. Using both will encrypt a file twice and cause it to be rejected.

Generate a key

Generating keys is an interactive process. **Note**: You need to remember the passphrase for your key! Execute the following command:

> C:\> pgp --gen-key "your key name" --key-type "RSA" --encryption-bits 2048 --passphrase "your passphrase for this key" --signing-bits 2048

APPENDIX E : GPG Kleopatra Install and Key Generation

Step 1: Download GPG / Kleopatra. Install the downloaded gpg4win.exe to install GPG / Kleopatra.

Note: Select the option "Kleopatra" when installing Gpg4win.



Step 2:

🔒 Gpg4win Setup		– 🗆 X
Gpg4win	Choose Components Choose which features of Gpg4win	you want to install.
Check the components you install. Click Next to contin	u want to install and uncheck the comp ue.	oonents you don't want to
Select components to inst	all: Studar (experimental) Kleopatra GpgOL GpgEX Browser integration	Description Position your mouse over a component to see its description,
Space required: 115.9 MB		
Gpg4win-4,2,0	< Back	Next > Cancel

Step 3:

1.5	—	\times
0	Choose Install Location	
Gpg4win	Choose the folder in which to install Gpg4win.	
Setup will install Gpg4win and select another folder	n in the following folder. To install in a different folder, click Browse r. Click Install to start the installation.	
Destination Folder C:\Users\sroe\Down	iloads\Gpg4win Browse	

Step 4:



Step 5:



Step 6:



Step 7: Once installed, run Kleopatra then select "Create a personal OpenPGP key pair."



Step 8: Verify your name and email address, then click on "Advance Settings."

		?	×
← Key	Pair Creation Wizard		
Enter	r Details		
Please the Ad	enter your personal details below. If you want more control over the param vanced Settings button.	neter	s, click on
Name:	Your Name		(optional)
EMail:	youremail@domain.com		(optional)
	Protect the generated key with a passphrase.		
	Your Name <youremail@domain.com></youremail@domain.com>	ed Se	ettings
	Create	С	ancel

Step 9: Make your screen match the following settings. Click "ok" to return to the previous screen, and then click "Create."

Advanced Settings	: - Kleopatra		?	×
Technical Details				
Key Material				
RSA	2,048 bits	\sim		
🗹 + RSA	2,048 bits	\sim		
O DSA	2,048 bits	\sim		
+ Elgamal	2,048 bits	\sim		
O ECDSA/EdDSA	ed25519	\sim		
+ ECDH	cv25519	\sim		
Certificate Usage				
Signing	\sim	Certification		
Encryption		Authenticatio	n	

Note: RSA bit size is the minimum that should be used.

Step 10: When prompted for a passphrase for your keys, provide something that you will remember. You will need this passphrase when adding other keys to your key ring.

Note: Create a passphrase that is at least 14 characters, and uses at least one upper case, one lower case, and one number.

🔒 pinentry-qt	—		\times
Please enter the protect your new Passphrase:	passphras / key OK	e to Can	cel

Step 11: Your new key pair has been created.

	ſ	
Key Pair Creation Wizard		
Key Pair Successfully Created		
Rey Full Successfully created		
Your new key pair was created successfully. Please find details on the resi	ult and some	
suggested next steps below.		
Result		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2 Next Steps Make a Backup Of Your Key Pair Send Public Key By EMail		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2 Next Steps Make a Backup Of Your Key Pair Send Public Key By EMail Upload Public Key To Directory Service		
Key pair created successfully. Fingerprint: 418C 666F BD03 79FB 9548 BBE9 C7BF 0F6E B5D0 C6A2 Next Steps Make a Backup Of Your Key Pair Send Public Key By EMail Upload Public Key To Directory Service		

IMPORTANT: Make a backup of your key pair and keep it safe. If you lose access to your computer, you can reimport your key pair.

Step 12: Once the key pair has been created, select "Export'" and then "Upload Public Key to Directory Service."

	?	\times
Key Pair Creation Wizard		
Key Pair Successfully Created		
Your new key pair was created successfully. Please find details on the result and suggested next steps below.	some	
Result 👘 OpenPGP Certificate Export ? 🗙 🦳		
Key pair crea Fingerprint: OpenPGP certificates exported successfully.		
ОК		
Next Steps		
Make a Backup Of Your Key Pair		
Send Public Key By EMail		
Upload Public Key To Directory Service		
	Eini	ch

Step 13: Once you have created your key pair, Kleopatra shows the contents of your key ring as shown below: Select the "Import" button and select the Indiana State public key (Indiana Department of Revenue ERF.asc).

	Search <alt+q></alt+q>				Al Certificates	
--	------------------------	--	--	--	-----------------	--

Step 14: After importing the state public key, you will be prompted to verify its validity, select "Yes."



Step 15: When prompted to certify this new key, select "Certify."

rtify with:	☑ Indiana Dept of Revenue <sroe@dor.in.gov> (certified, created: 01/05/2021)</sroe@dor.in.gov>	
] Indiana	Department of Revenue ERF <ratkison@dor.in.gov></ratkison@dor.in.gov>	

Step 16: You will be prompted for the passphrase of your key pair.



Step 17: When importing the state key, you will be prompted to verify. Select "Continue."



APPENDIX F: Common Errors

Error	Description
l did not receive an acknowledgment email.	File was not named correctly. Files not adhering to the naming convention will NOT be acknowledged or processed. If you do NOT receive an acknowledgment email, contact DOR at <u>bulkfiler@dor.in.gov</u> before resending any files.
"File not Found"	File was not encrypted using the department key. <u>See Appendix A</u> for instructions.
"Duplication filename this calendar year"	Each file submission must have a unique filename within a calendar year. If your file is rejected for "Bad Filename" error, resubmit your file using a new file name and an alteration inside the file such as the "transmissionid" node or "timestamp" node. This will avoid a duplicate file being submitted.
l do not know the passphrase for PGP.	The passphrase is the phrase you entered when creating your private key. DOR does not retain this information for your security. If you do not remember your passphrase, you can delete your private key and create a new one.
I cannot log in to the SFTP server.	If you unsuccessfully attempt to log in to sftp.dor.in.gov, check that your firewall allows outbound traffic to host address "SFTP.DOR.IN.GOV".
Indiana Department of Revenue key is disabled.	Bring up Symantec Encryption Desktop by clicking your start icon in Windows and clicking All Programs>Symantec Encryption>Symantec Encryption Desktop. Then click the view tab at the top. Then click PGP Keys. Find Indiana Department of Revenue ERF and right click it. Then select Enable. This should enable you to use the key.
Errors in acknowledgments	 The three most common file errors are: Special characters in text fields (e.g., comma (,), period (.), semicolon (;), colon (:), ampersand (&), apostrophe ('), number (#)) Putting decimals into fields that require whole numbers Space at end of text field

APPENDIX G: Common Acronyms

Acronym	Description
ACH	Automated Clearing House
DOR	Indiana Department of Revenue
EIN	Employee Identification Number
ERF	Electronic Return Filing
GPG	GNU Privacy Guard (encryption technology)
INTIME	Indiana Taxpayer Information Management Engine (DOR's e-services portal)
ITS	Indiana Tax System (DOR's Tax Processing System)
MEF	Modernized E-File
MVR	Motor Vehicle Rental
PGP	Pretty Good Privacy (encryption technology)
SFTP	Secure File Transfer Portal
TID	Taxpayer State Identifier
WTH	Withholding

APPENDIX H: Form Types, Bulk Filing Methods, and Options

A chart of all the tax form types and the various bulk filing methods and options available for each is available at <u>dor.in.gov/files/dor-efile-methods-bulk.pdf</u>